

ALL THE YEAR ROUND.

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HALF A MILLION OF MONEY.

BY THE AUTHOR OF "BARBARA'S HISTORY."

PROLOGUE. A.D. 1760.

JACOB TREFALDEN, merchant and alderman of London, lay dying in an upper chamber of his house in Basinghall-street, towards evening on the third day of April, Anno Domini seventeen hundred and sixty.

It was growing rapidly dusk. The great house was full of gloom, and silence, and the shadow of death. Two physicians occupied two easy-chairs before the fire in the sick man's chamber. They were both notabilities in their day. The one was Sir John Pringle, Physician Extraordinary to the King—a brave and skilful man who had smelt powder at Dettingen, and won the soldiers' hearts by his indomitable coolness under fire. The other was Doctor Joshua Ward, commonly called "Spot Ward" from his rubicund face; and immortalised by Hogarth in that bitter caricature called *The Company of Undertakers*.

These gentlemen did little in the way of conversation. When they spoke at all, it was in a whisper. Now and then, they compared their watches with the timepiece on the mantel-shelf. Now and then, they glanced towards the bed where, propped almost upright with pillows, an old man was sinking gradually out of life. There was something very ghastly in that old man's face, purple-hued, unconscious, and swathed in wet bandages. His eyes were closed. His lips were swollen. His breathing was slow and stertorous. He had been smitten down that day at noon by a stroke of apoplexy; was carried home from 'Change in a dying state; and had not spoken since. His housekeeper crouched by his bedside, silent and awestruck. His three sons and his lawyer waited in the drawing-room below. They all knew that he had not two more hours to live.

In the mean time the dusk thickened, and the evening stillness grew more and more oppressive. A chariot rumbled past from time to time, or a news-vendor trudged by, hawking the *London Gazette*, and proclaiming the sentence just passed on Lord George Sackville. Sometimes a neighbour's footboy came to the door with a civil inquiry; or a little knot of passengers

loitered on the opposite pavement, and glanced up, whisperingly, at the curtained windows. By-and-by, even these ceased to come and go. A few oil-lamps were lighted at intervals along the dingy thoroughfare, and the stars and the watchmen came out together.

"In the name of Heaven," said Captain Trefalden, "let us have lights!"—and rang the drawing-room bell.

Candles were brought, and the heavy damask curtains were drawn. Captain Trefalden took up the *Gazette*; Frederick Trefalden looked at himself in the glass, arranged the folds of his cravat, yawned, took snuff, and contemplated the symmetry of his legs; William Trefalden drew his chair to the table, and began abstractedly turning over the leaves of the last *Idler*. There were other papers and books on the table as well—among them a little volume called *Rasselas*, from the learned pen of Mr. Samuel Johnson (he was not yet LL.D.), and the two first volumes of *Tristram Shandy*, written by that ingenious gentleman, the Reverend Laurence Sterne. Both works were already popular, though published only a few months before.

These three brothers were curiously alike, and curiously unlike. They all resembled their father; they were all fine men; and they were all good-looking. Old Jacob was a Cornish man, had been fair and stalwart in his youth, and stood five feet eleven without his shoes. Captain Trefalden was not so fair; Frederick Trefalden was not so tall; William Trefalden was neither so fair, nor so tall, nor so handsome; and yet they were all like him, and like each other.

Captain Jacob was the eldest. His father had intended him for his own business; but, somehow or another, the lad never took kindly to indigo. He preferred scarlet—especially scarlet turned up with buff—and he went into the army. Having led a roving, irregular youth; sown his wild oats in various congenial European soils; and fought gallantly at Dettingen, Fontenoy, Laffeldt, and Minden, he had now, at forty years of age, committed the unspeakable folly of marrying for neither rank nor money, but only for love. His father had threatened to disinherit Captain Trefalden for this misdeed, and, for five months past, had forbidden him the house. His brothers were even more indignant than their father—or had seemed to be so. In short, this was the first occasion on which the

worthy officer had set foot in Basinghall-street for many a long day; and all three gentlemen were naturally somewhat constrained and silent.

Frederick, the second son, was thirty-six; William, thirty. Frederick hated indigo almost as cordially as his brother Jacob; William had scarcely a thought that was not dyed in it. Frederick was an airy, idle, chocolate-drinking, snuff-taking, card-playing, ridotto-haunting man of pleasure. William was a cool, methodical, ambitious man of business. Neither of the three had ever cared much for the other two. It was in the nature of things that much affection should exist between them. Their temperaments and pursuits were radically unlike. They had lost their mother while they were yet boys. They had never had a sister. The sweet womanly home-links had all been wanting to bind their hearts together.

And now the brothers were met under their father's roof, this memorable third evening in April; and in the dark chamber overhead, already beyond all help from human skill, that father lay dying. They were all thinking the same thoughts in the silence of their hearts, and in those thoughts there was neither prayer nor sadness. Poor old man! He was immensely rich—he was pitifully destitute. No one loved him; and he was worth Half a Million of Money.

Mr. Frederick Trefalden took out his watch, swore a fashionable oath, and declared that he was famishing.

"Have somewhat to eat, brother Fred," suggested the captain; and so rang the bell again, and ordered refreshments to be taken into the dining-room.

The two younger Trefaldens exchanged glances and a covert smile. Their elder brother was already assuming the master, it should seem! Well, well, Lawyer Beavington is there, and the will has yet to be read.

In the mean time Mr. Fred and the captain go down together; for the latter has ridden up from Hounslow, and will not object to join his brother in "a snack of cold meat and a bumper of claret." Mr. Will, like a sober citizen, has dined at two o'clock, and only desires that a dish of tea may be sent to him in the drawing-room.

If anything could be more dismal than that gloomy drawing-room, it was the still gloomier dining-room below. The walls were panelled with dark oak, richly carved. The chimney-piece was a ponderous cenotaph in black and yellow marble. The hangings were of mulberry-coloured damask. A portrait of the master of the house, painted forty years before by Sir James Thornhill, hung over the fireplace. Seen by the feeble glimmer of a couple of wax-lights, there was an air of sepulchral magnificence about the place which was infinitely depressing. The very viands might have reminded these gentlemen of funeral baked meats—above all, the great real pasty which lay in state in the middle of the board. They were both hungry, however, and it did nothing of the kind.

The captain took his place at the head of the table, and plunged his knife gallantly into the heart of the pasty.

"If thou hast as good a stomach, Fred, as myself," said he, growing cordial under the influence of the good things before him, "I'll warrant thee we'll sack this fortress handsomely!"

The fine gentleman shrugged his shoulders somewhat contemptuously.

"I detest such coarse dishes," said he. "I dined with Sir Harry Fanshawe yesterday at the Hummums. We had a ragout of young chicks, not a week out of the shell, and some à la mode beef that would have taken thy breath away, brother Jacob."

"I'd as lieve eat of this pasty as of any ragout in Christendom," said the captain.

"Mr. Horace Walpole and Mrs. Clive were at dinner all the time in the next room," continued the beau; "and the drollest part of the story is that Sir Harry and I adjourned in the evening to Vauxhall, and there, by Jove! found ourselves supping in the very next box to Mr. Horace and Mrs. Kitty again!"

"Help yourself to claret, Fred, and pass the bottle," said the captain, who, strange to say, saw no point in the story at all.

"Not bad wine," observed Mr. Fred, tasting his claret with the air of a connoisseur. "The old gentleman hath an excellent cellar."

"Ay, indeed," replied the captain, thoughtfully.

"But he never knew how to enjoy his money."

"Never."

"To live in a place like this, for instance," said the beau, looking round the room. "Basinghall-street—laugh! And to keep such a cook; and never to have set up his chariot! 'Sdeath, sir, you and I will know better what to do with the guineas!"

"I should think so, brother Fred—I should think so," replied the captain, with a touch of sadness in his voice. "'Twas a dull life—poor old gentleman! Methinks you and I might have helped to make it gayer."

"Curse me, if I know how!" ejaculated Mr. Fred.

"By sticking to the business—by living at home—by doing like young Will, yonder," replied the elder brother. "That boy hath been a better son than you or I, brother Fred."

Mr. Fred looked very grave indeed. "Will hath an old head on young shoulders," said he. "Harkee, Jacob, hast any notion how the old man hath bestowed his money?"

"No more than this glass of claret," replied the captain.

They were both silent. A footstep went by in the hall. They listened; they looked at each other; they filled their glasses again. The same thought was uppermost in the mind of each.

"The fairest thing, Fred," said the honest captain, "would be, if 'twere left to us, share and share alike."

"Share and share alike!" echoed Mr. Fred, with a sounding oath. "Nay; the old man was too proud of his fortune to do that, brother Jacob. My own notion of this matter is—Hush! Any one listening?"

Captain Trefalden rose, glanced into the hall, closed the door, and resumed his seat.

"Not a soul. Well?"

"Well, my own notion is, that we younger sons shall have a matter of sixty or eighty thousand a piece; while you, as the head of the family, will take the bulk."

"It may be, Fred," mused the captain, complacently.

"And that bulk," continued Mr. Fred, "will be some three hundred and forty thousand pounds."

"I shall have to ask thee, Fred, how to spend it," said the captain, smiling.

"Then thou shalt spend it like a prince. Thou shalt buy an estate in Kent, and a town-house in Soho; thou shalt have horses, chariots, lacqueys, liveries, wines, a pack of hounds, a box at the Italian Opera——"

"Of which I don't understand a word," interrupted the captain.

"A French cook, a private chaplain, a black footboy, a suite of diamonds for thy wife, and for thyself the prettiest mistress——"

"Hold, Fred," interposed the captain again. "None of the last, I beseech thee. My days of gallantry are over."

"But, my dear brother, no man of quality——"

"I'm not a man of quality," said the other.

"I'm a simple soldier, and the son of a plain City merchant."

"Well, then, no man of parts and fortune——"

"The fortune's not mine yet, Fred," said the captain, dryly. "And as for my parts, why I think the less said of them the better. I'm no scholar, and that thou knowest as well as myself. Hark! some one taps. Come in."

The door opened, and a bronzed upright man, with something of a military bearing, came in. He held his hat and cane in his hand, and saluted the brothers courteously. It was Sir John Pringle.

"Gentlemen," he said, gravely, "I grieve to be the bearer of sad tidings."

The brothers rose in silence. Captain Trefalden changed colour.

"Is he—is my father dead?" he faltered.

The physician bent his head.

Captain Trefalden turned his face away. Frederick Trefalden took out his handkerchief, and ostentatiously wiped away a tear—which was not there.

"Dr. Ward is gone," said Sir John, after a brief pause. "He desired his respects and condolences. Gentlemen, I wish you a good evening."

"You will take a glass of claret, Sir John?" said Mr. Fred, pressing forward to the table. But almost before he could say the words, the physician had waved a civil negative, and was

gone. Mr. Fred shrugged his shoulders, filled the glass all the same, and emptied it.

"Zounds, brother," said he, "'tis of no use to be melancholy. Remember thou'rt now the head of the family. Let us go up-stairs, and read the will."

In the mean time, William Trefalden, like a methodical young man of business, had been up to his father's room to find his father's keys, and down to the counting-house to fetch his father's deed-box out from the iron safe. When Mr. Fred and the captain came into the room, they found Lawyer Beavington with his spectacles on, and the box before him.

"Gentlemen," he said, with calm importance, "be pleased to sit."

So the brothers drew their chairs to the table, and sat down; all silent; all somewhat agitated. The man of law unlocked the box.

It was full of papers, leases, transfers, debentures, agreements, bills of exchange, and so forth. These had all to be taken out, opened, and laid aside before the will turned up. That important document lay at the very bottom, like hope at the bottom of Pandora's casket.

"'Tis not a long will," observed Mr. Beavington, with a preparatory cough.

As he unfolded it, a slip of paper fell out.

"A memorandum, apparently, in your excellent father's own hand," said he, glancing through it. "Hm—ha—refers to the amount of his fortune. Have you, gentlemen, framed any ideas of the extent of the property?"

"'Twas thought my father owned half a million of money," replied Mr. Fred, eagerly.

"More than that," said the youngest son, with a shake of the head.

"You are right, sir. The memorandum runs thus: '*Upon a rough calculation, I believe I may estimate my present estate at about five hundred and twenty-five thousand pounds. (Dated) January the first, Anno Domini seventeen hundred and sixty. Jacob Trefalden.*' A goodly fortune, gentlemen—a goodly fortune!"

The three brothers drew a deep breath of satisfaction.

"Five hundred and twenty-five thousand pounds!" repeated the captain. "Prithee, Mr. Beavington, proceed to the will."

The lawyer folded up the memorandum very slowly, drew the candles nearer, wiped his spectacles, and began.

"IN the name of GOD, AMEN. I JACOB TREFALDEN born in the town of Redruth in the County of Cornwall and now a Citizen of London, Merchant (a Widower) being at present in good health of Body, and of sound and disposing Mind and Memory, for which I bless God, Do this eleventh day of January one thousand seven hundred and sixty make and ordain this my last Will and Testament in manner and form following (that is to say) IMPRIMIS I DESIRE to be interred in my Family Vault by the side of my lately deceased wife and with as

little Pomp and ceremony as maybe. ITEM I give to such of my Executors hereinafter named as shall act under this my Will Five Hundred pounds Sterling each to be paid to or retained by them within six Calendar Months after my decease. I GIVE to my three sons Jacob, Frederick and William Five Thousand pounds Sterling each. I GIVE——"

"Stay! five thou—— please to read that again, Mr. Beavington," interrupted Captain Trefalden.

"Five Thousand pounds Sterling each," repeated the lawyer. "The amount is quite plain. But have patience, gentlemen. We are but at the preliminaries. This five thousand each hath, doubtless, some special purpose. The main business is to come."

"Very possibly—very possibly, Mr. Beavington," replied the Captain. "I am all attention."

"ITEM I GIVE to my Cashier Edward Prescott Five Hundred pounds Sterling. I GIVE to my other clerks One Hundred pounds Sterling each. AND I GIVE to my Household Servants Two Hundred pounds Sterling to be divided among them in equal shares. All which last mentioned legacies I direct shall be paid within three Calendar Months next after my decease. I GIVE to the Minister for the time being of Redruth aforesaid and to the Minister for the time being of the Parish in which I shall happen to reside immediately previous to my decease One Hundred pounds Sterling each to be paid to them within One Calendar Month after that event shall happen and be by them forthwith distributed in such manner and proportion as they shall think proper among the poor Widows belonging to their Parishes respectively. ITEM, I do hereby direct and appoint that my Executors shall as soon as possible after my decease set apart out of my Property which consists entirely of Personal Estate, and is chiefly invested in the Government Stocks and Funds of this Kingdom, so much of my Funded property as shall be equal in value to the sum of Five Hundred Thousand pounds Sterling——"

"Ha! now for it!" exclaimed Mr. Fred, breathlessly.

"——the sum of Five Hundred Thousand pounds Sterling," continued the lawyer, "which I give to the Lord Mayor and Aldermen of the City of London for the time being and their successors for ever IN TRUST for the purposes hereinafter expressed and I desire that as to this Gift they shall be called 'TREFALDEN'S TRUSTEES' and that the amount of my Funded Property so to be set apart shall immediately afterwards be transferred to them accordingly."

The lawyer paused to clear his glasses. The brothers looked blankly in each other's faces.

"Good God! Mr. Beavington," gasped Captain Trefalden, "what does this mean?"

"On my word, sir, I have no more notion

than yourself," replied the lawyer. "The will is none of my making."

"Who drew it up?" asked Mr. Will, pe-remptorily.

"Not I, sir. Your father hath gone to some stranger for this business. But perchance when we know more——"

"Enough, sir, go on," said Mr. Fred and Mr. Will together.

The lawyer continued:

"AND I hereby declare my Will to be that my said Trustees shall receive the annual Income of the said Trust Fund, and lay out and invest such Income in their names in the Purchase of Government Securities, and repeat such receipts and Investments from time to time in the nature of Compound Interest during the space of One Hundred years from the date of my decease, and that such accumulations shall continue and be increased until the same, with the original Trust Fund, shall amount to, and become in the aggregate, one entire clear principal sum of NINE MILLION POUNDS Sterling and upwards, AND I DESIRE that the same entire clear Principal Sum shall thenceforth be, or be considered as, divided into two equal parts, AND I GIVE One equal half part thereof unto the direct Heir Male of the Eldest Son of my Eldest Son, in total exclusion of the younger Branches of my Family and their descendants. AND as to the other equal half part of the said entire Principal Sum, I DIRECT my said Trustees to apply and dispose of the same in manner following (that is to say) IN the first place, in purchasing within the liberties of the City of London a plot of Freehold Ground of sufficient magnitude, and erecting thereon, under the superintendence of some eminent Architect, a Handsome and Substantial Building, with all suitable Offices, to be called 'THE LONDON TREFALDEN BE-NEVOLENT INSTITUTION.'"

"AND in the next place, in affording pecuniary aid as well permanent as temporary to decayed Tradesmen, Mercantile Men, Ship Brokers, Stock Brokers, Poor Clergymen, and Members of the Legal and Medical Professions, and the Widows and Orphans of each of those Classes respectively, and, if thought fit, to advance Loans without Interest to honest but unfortunate Bankrupts. With full power to receive into the Institution a limited number of poor and deserving Persons being Widows and Orphans of Citizens of London, and to maintain, clothe, and educate them so long as the Trustees shall think proper.

"AND in order that such Institution may be properly established and may be managed and supported in a satisfactory manner, I request my said Trustees to prepare a scheme for the permanent Establishment and support thereof, and to submit the same to the Master of the Rolls for his approval. PROVIDED ALWAYS that in case there shall be no such Male Heir in the direct line from the Eldest Son of my Eldest Son, then I direct my said Trustees to apply the first-

mentioned half of the said entire principal sum in founding lesser Institutions of a similar kind to the above in Manchester, Liverpool, Bristol and Birmingham for the Benefit of the several classes of persons above enumerated and all which Institutions it is my Will shall be governed by the same Laws and Regulations as the original Institution or as near thereto as circumstance will permit. ITEM I GIVE all the rest and residue of my Funded Property Ready Money and Securities for Money Merchandise Debts Pictures Plate Furniture and all other my Property not otherwise disposed of by this my Will (but subject to the payment of my Debts Legacies Funerals and Testamentary expenses) UNTO my said three Sons in equal shares and in case any dispute shall arise between them as to the division thereof the matter shall be referred to my Executors whose decision shall be final. LASTLY I APPOINT my friends Richard Morton, Erasmus Brooke, Daniel Shuttleworth, and Arthur Mackenzie all of London, General Merchants, to be the Executors of this my Will. IN WITNESS whereof I the said Jacob Trefalden have hereunto set my hand and seal the day and year first above written.

“JACOB TREFALDEN.

“Signed sealed published and declared by the above named Jacob Trefalden as and for his last Will and Testament in the presence of us who at his request and in his presence have subscribed our Names as Witnesses thereunto.

“Signed “NATHANIEL MURRAY.

“ALEXANDER LLOYD.”

Mr. Beavington laid down the will, and took off his glasses. The brothers sat staring at him, like men of stone. William Trefalden was the first to speak.

“I shall dispute this will,” he said, looking very pale, but speaking in a firm, low tone. “It is illegal.”

“It is a d—d, unnatural, infamous swindle,” stammered Mr. Fred, starting from his seat, and shaking his clenched fist at the open document.

“If I had known what a cursed old fool—”

“Hush, sir, hush, I entreat,” interposed the lawyer. “Let us respect the dead.”

“Zounds! Mr. Beavington, we’ll respect the dead,” said Captain Trefalden, bringing his hand down heavily upon the table; “but I’ll be hanged if we’ll respect the deed! If it costs me every penny of the paltry five thousand, I’ll fight this matter out, and have justice.”

“Patience, brother Jacob—patience, brother Fred,” said the youngest Trefalden. “I tell you both, the will is illegal.”

“How so, sir?” asked the lawyer, briskly. “How so?”

“By the Mortmain Act passed but a few years since—”

“In seventeen hundred and thirty-six, statute nine of his present Majesty King George the Second,” interposed Mr. Beavington.

“—which permits no land, nor money for the

purchase of land, to be given in trust for the benefit of any charitable uses whatever.”

The lawyer nodded approvingly.

“Very true, very true—very well remembered, Mr. Will,” he said, rubbing his hands; “but you forget one thing.”

“What do I forget?”

“That ‘a citizen of London may, by the custom of London, devise Land situate in London in Mortmain; but he cannot devise Land out of the city in Mortmain,’ and for that quotation I can give you chapter and verse, Mr. Will.”

Mr. Will put his hand to his head with a smothered groan.

“Then, by Heavens!” said he, tremulously, “’tis all over.”

It was all over, indeed. Mr. Fred had spoken truly of the pride which Jacob Trefalden took in his fortune. Great as it was, he resolved to build it yet higher, and sink its foundations yet more broadly and deeply. To leave a colossal inheritance to an unborn heir, and to found a charity which should perpetuate his name through all time, were the two projects nearest and dearest to that old man’s heart. He had brooded over them, matured them, exulted in them secretly, for many a past year. The marriage of Captain Trefalden in November, 1759, only hastened matters, and legalised a foregone conclusion. Well was it for Jacob Trefalden’s sons that his fortune amounted to that odd twenty-five thousand pounds. The Half Million had slipped through their fingers, and was lost to them for ever.

CHAPTER I. THE PASSING OF A HUNDRED YEARS.

WHEN the princess in the fairy tale went to sleep for a hundred years, everything else in that enchanted palace went to sleep at the same time. The natural course of things was suspended. Not a hair whitened on any head within those walls. Not a spider spun its web over the pictures; not a worm found its way to the books. The very Burgundy in the cellar grew none the riper for the century that it had lain there. Nothing decayed, in short, and nothing improved. Very different was it with this progressive England of ours during the hundred years that went by between the spring-time of 1760 and that of 1860, one hundred years after. None went to sleep in it. Nothing stood still. All was life, ferment, endeavour. That endeavour, it is true, may not always have been best directed. Some cobwebs were spun; some worms were at work; some mistakes were committed; but, at all events, there was no stagnation. En revanche, if, when we remember some of those errors, we cannot help a blush, our hearts beat when we think of the works of love and charity, the triumphs of science, the heroes and victories which that century brought forth. We lost America, it is true; but we won Gibraltar, and we colonised Australia. We fought the French on almost every sea and shore upon the map, except, thank God! our

own. We abolished slavery in our colonies. We established the liberty of the press. We lit our great city from end to end with a light only second to that of day. We originated a system of coaching at twelve miles the hour, which was unrivalled in Europe; and we superseded it by casting a network of iron roads all over the face of the country, along which the traveller has been known to fly at the rate of a mile a minute. Truly a marvellous century! perhaps the most marvellous which the world has ever known, since that from which all our years are dated!

And during the whole of this time, the Trefalden legacy was fattening at interest, assuming overgrown proportions, doubling, trebling, quadrupling itself over and over and over again.

Not so the Trefalden family. They had increased and multiplied but scantily, according to the average of human kind; and had had but little opportunity of fattening, in so far as that term may be applied to the riches of the earth. One branch of it had become extinct. Of the other two branches only three representatives remained. We must pause to consider how these things came to pass, but only for a few moments; for of all the trees that have ever been cultivated by man, the genealogical tree is the driest. It is one, we may be sure, that had no place in the garden of Eden. Its root is in the grave; its produce mere Dead Sea fruit—apples of dust and ashes.

The extinct branch of the Trefaldens was that which began and ended in Mr. Fred. That ornament to society met his death in a tavern row about eighteen months after the reading of the will. He had in the mean while spent the whole of his five thousand pounds, ruined his tailor, and brought an honest eating-house keeper to the verge of bankruptcy. He also died in debt to the amount of seven thousand pounds; so that, as Mr. Horace Walpole was heard to say, he went out of the world with credit.

William, the youngest of the brothers, after a cautious examination of his prospects from every point of view, decided to carry on, at least, a part of the business. To this end, he entered into partnership with his late father's managing clerk, an invaluable person, who had been in old Jacob's confidence for more than thirty years, and, now that his employer was dead, was thought to know more about indigo than any other man in London. He had also a snug sum in the Funds, and an only daughter, who kept house for him at Islington. When Mr. Will had ascertained the precise value of this young lady's attractions, he proposed a second partnership, was accepted, and married her. The fruit of this marriage was a son named Charles, born in 1770, who became in time his father's partner and successor, and in whose hands the old Trefalden house flourished bravely. This Charles, marrying late in life, took to wife the second daughter of a rich East India Director, with twelve thousand pounds for her fortune.

She brought him four sons, the eldest of whom, Edward, born in 1815, was destined to indigo from his cradle. The second and third died in childhood, and the youngest, named William, after his grandfather, was born in 1822, and educated for the law.

The father of these young men died suddenly in 1844, just as old Jacob Trefalden had died more than eighty years before. He was succeeded in Basinghall-street by his eldest son. The new principal was, however, a stout, apathetic bachelor of self-indulgent habits, languid circulation, and indolent physique—a mere Roi Fainéant, without a Martel to guide him. He reigned only six years, and died of a flow of turtle soup to the head, in 1850, leaving his affairs hopelessly involved, and his books a mere collection of Sybilline leaves which no accountant in London was Augur enough to decipher. With him expired the mercantile house of Trefalden; and his brother, the lawyer, now became the only remaining representative of the youngest branch of the family.

For the elder branch we must go back again to 1760.

Honest Captain Jacob, upon whom had now devolved the responsibility of perpetuating the Trefalden name, took his five thousand pounds with a sigh; wisely relinquished all thought of disputing the will; sold his commission; emigrated to a remote corner of Switzerland; bought land, and herds, and a quaint little mediæval château surmounted by a whole forest of turrets, gable-ends, and fantastic weather-cocks; and embraced the patriarchal life of his adopted country. Switzerland was at that time the most peaceful, the best governed, and the least expensive spot in Europe. Captain Jacob, with his five thousand pounds, was a *millionnaire* in the Canton Grisons. He was entitled to a seat in the Diet, if he chose to take it; and a vote, if he chose to utter it; and he interchanged solemn half-yearly civilities with the stiffest old republican aristocrats in Chur and Thusis. But it was not for these advantages that he valued his position in that primitive place. He loved ease, and liberty, and the open air. He loved the simple, pastoral, homely life of the people. He loved to be rich enough to help his poorer neighbours—to be able to give the pastor a new cassock, or the church a new font, or the young riflemen of the district a silver watch to shoot for, when the annual Schützen Fest came round. He could not have done all this in England, heavily taxed and burthened as England then was, upon two hundred and fifty pounds a year. So the good soldier framed his commission, hung up his sword to rust over the dining-room chimney-piece, and planted and drained, sowed and reaped, shot an occasional chamois, and settled down for life as a Swiss country gentleman. Living thus, with the wife of his choice, and enjoying the society of a few kindly neighbours, he became the happy father of a son and two daughters, between whom, at his death, he

divided his little fortune, share and share alike, according to his own simple notions of justice and love. The daughters married and settled far away, the one in Italy, the other on the borders of Germany. The son, who was called Henry, and born in 1762, inherited his third of the patrimony, became a farmer, and married at twenty years of age. He was necessarily a much poorer man than his father. Two-thirds of the best land had been sold to pay off his sisters' shares in the property; but he kept the old château (though he dwelt in only a corner of it), and was none the less respected by his neighbours. Here he lived frugally and industriously, often driving his own plough, and branding his own sheep; and here he brought up his two sons, Saxon and Martin, the first of whom was born in 1783, and the second in 1786. They were all the family he reared. Other children were born to him from time to time, and played about his hearth, and gladdened the half-deserted little château with their baby laughter; but they all died in earliest infancy, and the violets grew thickly over their little graves in the churchyard on the hill.

Now Henry Trefalden knew right well that one of these boys, or a descendant of one of these boys, must inherit the great legacy by-and-by. He knew, too, that it was his duty to fit them for that gigantic trust as well as his poor means would allow, and he devoted himself to the task with a love and courage that never wearied. To make them honest, moderate, charitable, and self-denying; to teach them (theoretically) the true uses of wealth; to instruct them thoroughly in the history and laws of England; to bring them up, if possible, with English sympathies; to keep their English accent pure; to train them in the fear of God, the love of knowledge, and the desire of excellence—this was Henry Trefalden's lifelong task, and he fulfilled it nobly.

His sons thrived alike in body and in mind. They were both fine fellows; brave, simple, and true. Neither of them would have told a lie to save his life. Saxon was fair, as a Saxon should be. Martin was dark-eyed and olive-skinned, like his mother. Saxon was the more active and athletic; Martin the more studious. As they grew older, Saxon became an expert mountaineer, rifle-shot, and chamois-hunter; Martin declared his wish to enter the Lutheran church. So the elder brother stayed at home, ploughing and planting, sowing and reaping, shooting and fishing, like his father and grandfather before him; and the younger trudged away one morning with his Alpenstock in his hand, and his wallet on his back, bound for Geneva.

Time went on. Henry Trefalden died; young Saxon became the head of the family; and Martin returned from the University to accept a curacy distant about eight miles from home. By-and-by, the good old priest, who had been the boys' schoolmaster long years before, also passed away; and Martin became pastor in his native place. The brothers now lived with their

mother in the dilapidated château, fulfilling each his little round of duties, and desiring nothing beyond them. They were very happy. That quiet valley was their world. Those Alps bounded all their desires. They knew there was a great legacy accumulating in England, which might fall to Saxon's share some day, if he lived long enough; but the time was so far distant, and the whole story seemed so dim and fabulous, that unless to laugh over it together in the evening, when they sat smoking their long pipes side by side under the trellised vines, the brothers never thought or spoke of the wealth which might yet be theirs. Thus more time went on, and old Madame Trefalden died, and the bachelor brothers were left alone in the little grey château. It was now 1830. In thirty more years the great legacy would fall due, and which of them might then be living to inherit it? Saxon was already a florid bald-headed mountaineer of forty-seven; Martin, a grey-haired priest of forty-four. What was to be done?

Sitting by their own warm hearth one bleak winter's evening, the two old bachelors took these questions into grave consideration. On the table between them lay a faded parchment copy of the alderman's last will and testament. It was once the property of worthy Captain Jacob, and had remained in the family ever since. They had brought this out to aid their deliberations, and had read it through carefully, from beginning to end—without, perhaps, being very much the wiser.

"It would surely go to thee, Martin, if I died first," said the elder brother.

"Thou'lt not die first," replied the younger, confidently. "Thou'rt as young, Sax, as thou wert twenty years ago."

"But in the course of nature——"

"In the course of nature the stronger stuff outlasts the weaker. See how much heartier you are than myself!"

Saxon Trefalden shook his head.

"That's not the question," said he. "The real point is, *would* the money fall to thee? I think it would. It says here, '*in total exclusion of the younger branches of my family and their descendants.*' Mark that—'*the younger branches,*' Martin. Thou'rt not a younger branch. Thou'rt of the elder branch."

"Ay, brother, but what runs before? Go back a line, and thou'lt see it says '*to the direct heir male of the eldest son of my eldest son.*' Now, thou'rt the eldest son of the eldest son, and I am not thy direct male heir. I am only thy younger brother."

"That's true," replied Saxon. "It seems to read both ways."

"All law matters seem to read both ways, Sax," said the priest; "and are intended to read both ways, 'tis my belief, for the confusion of the world. But why puzzle ourselves about the will at all? We can only understand the plain fact that thou art the direct heir, and that the fortune

must be thine, thirty years hence, if thou'rt alive to claim it."

Saxon shrugged his broad shoulders, and lit his pipe with a fragment of blazing pine-wood picked from the fire.

"Pish! at seventy-seven years of age, if I am alive!" he exclaimed. "Of what good would it be to me?"

Martin made no reply, and they were both silent for several minutes. Then the pastor stole a furtive glance at his brother, coughed, stared steadily at the fire, and said,

"There is but one course for it, Sax. Thou must marry."

"Marry!" echoed the stout farmer, all aghast.

The pastor nodded.

"Marry? At my time of life? At forty-seven—No, thank you, brother. Not if I know it."

"Our poor father always desired it," said Martin.

Saxon took no notice.

"And it is in some sense thy duty to provide an heir to this fortune which——"

"The fortune be—I beg thy pardon, Martin; but what can it matter to thee or me what becomes of the fortune after we are both dead and gone? It would go to found charities, and do good somehow and somewhere. 'Twould be in better hands than mine, I'll engage."

"I am not so sure of that," replied the pastor. "Public charities do not always do as much good as private ones. Besides, I should like to think that a portion of that great sum might be devoted hereafter to the benefit of our poor brethren in Switzerland. I should like to think that by-and-by there might be a good road made between Taminus and Flims; and that the poor herdsmen at Altfelden might have a chapel of their own, instead of toiling hither eight long miles every Sabbath; and that a bridge might be built over the Hinter Rhine down by Ortenstein, where poor Rütli's children were drowned last winter when crossing by the ferry."

Saxon smoked on in silence.

"All this might be done, and more," added the pastor, "if thou wouldst marry, and bring up a son to inherit the fortune."

"Humph!" ejaculated the farmer, looking very grim.

"Besides," said Martin, timidly, "we want a woman in the house."

"What for?" growled Saxon.

"To keep us tidy and civilised," replied the pastor. "Things were very different, Sax, when our dear mother was with us. The house does not look like the same place."

"There's old Löttsch," muttered Saxon. "He does as well as any woman. He cooks, makes bread——"

"Cooks?" remonstrated the younger brother.

"Why, the kid to-day was nearly raw, and the mutten yesterday was baked to a cinder."

The honest farmer stroked his beard, and

sighed. He could not contradict that stubborn statement. Martin saw his advantage, and followed it up.

"There is but one remedy," he said, "and that a plain one. As I told thee before, Sax, thou must marry. 'Tis thy duty."

"Whom can I marry?" faltered Saxon, dolefully.

"Well, I've thought of that, too," rejoined the pastor, in an encouraging tone. "There's the eldest daughter of our neighbour Clauss. She is a good, prudent, housewifely maiden, and would suit thee exactly."

The elder brother made a wry face.

"She's thirty-five, if she's an hour," said he, "and no beauty."

"Brother Saxon," replied the pastor, "I am ashamed of thee. What does a sensible man of seven-and-forty want of youth and beauty in a wife? Besides, Marie Clauss is only thirty-two. I made particular inquiry about her age this morning."

"Why not marry her yourself, Martin?" said the farmer. "I'm sure that would do quite as well."

"My dear Saxon, only look again at the will, and observe that it is the direct heir male of the eldest son of the eldest son——"

Saxon Trefalden pitched his pipe into the fire, and sprang to his feet with an exclamation that sounded very like an oath.

"Enough, brother, enough!" he interrupted.

"Say no more—put the will away—I'll go down to the Berghthal to-morrow, and ask her."

And so Saxon Trefalden put on his Sunday coat the following morning, and went forth like a lamb to the sacrifice.

"Perhaps she'll refuse me," thought he, as he knocked at Farmer Clauss's door, and caught a glimpse of the fair Marie at an upper casement.

But that inexorable virgin did nothing of the kind.

She married him.

There were no ill-cooked dinners after that happy event had taken place. The old house became a marvel of cleanliness, and the bride proved herself a very Phoenix of prudence and housewifery. She reformed everything—including the hapless brothers themselves. She banished their pipes, condemned old Carlo to his kennel, made stringent by-laws on the subject of boots, changed the hour of every meal, and, in short, made them both miserable. Worst of all, she was childless. This was their bitterest disappointment. They had given up their pipes, their peace, and their liberty, for nothing. Poor Martin always looked very guilty if any allusion happened to be made to this subject.

Matters went on thus for seven years, and then, to the amazement of the village, and the delight of the brothers, Madame Marie made her husband the happy father of a fine boy. Such a glorious baby was never seen. He had fair hair and blue eyes, and his father's nose; and they

christened him Saxon; and the bells were rung; and the heir to the great fortune was born at last!

RESPECTING THE SUN.

HOWEVER clear the sun may have been at noonday for ages past, his nature and constitution are not even yet altogether clear to us. What is he? How far off from us? Where does he come from? Whither is he going? are questions which still await a definite answer. The sun is a statement with a very broad margin.

His distance, which our school-books take for granted to be exactly ninety-five millions of miles, is open to a little correction of one million of miles, more or less. Our present means of measurement do not enable us to attain greater precision; but in eighteen hundred and seventy-four we shall have more accurate information. The transit of Venus across the sun's disk, which will take place in the course of that year, will afford an opportunity of confirming or correcting the figures that now tell us how far it is from our family mansion to the sun.

The sun is enormous. His volume is not quite one and a half million times that of the earth. His density, on the other hand, is comparatively inconsiderable, being not half as much again as that of water; whereas Venus, the Earth, and Mars, are from five to six times as dense as water. Saturn, the lightest of all the known planets, is only three-quarters as heavy as water. Consequently, were he to fall into an ocean like ours, he would float, rings and all, like an enormous ball of cork. The small weight of the sun, in proportion to his size, is a fact to be carefully noted. He revolves on his axis in twenty-five and a half of our days; that space of time, therefore, is the length of *his* day, if we can say that he has a day.

And where is he going to? The sun, with his whole family of planets and satellites, is said to be drifting, slowly but surely, in the direction of the constellation Hercules. About his pace, the learned differ. According to Argelauder's observations, he travels twice as fast as the earth in her orbit. Other authorities give him less velocity, stating that while the earth spins along at the rate of nearly twenty miles per second, the sun pursues his travels through space at only five miles per second. Moreover, the constellation Hercules is a very vague port for us all to be bound to. We are anything but sure that itself is a fixture. Hercules may be coming to meet us, quite as rapidly as we are advancing to shake hands with him. It has been shrewdly asked, whether our sun is not a satellite sun, revolving round a central sun of whose existence we are not yet cognisant. Stellar astronomy offers numerous examples of stars performing their revolutions round other stars which serve as their centre of motion.

Where does he come from? and what is he? are two very closely connected questions. Re-

specting the second, we are assured of one thing—that it is the sun who gives life to all the worlds around him, and who resembles none of them; who, for the planets and the creatures which dwell on them, is the principle of motion, the source of warmth, the radiator of heat, perhaps even the grand reservoir of ambient electricity.

From the remotest antiquity, the sun has been considered a fire; but many have been the disputes to determine whether that fire is pure or gross, a self-sustaining fire, or one which needs aliment; a perpetual fire, or one which may go out. Anaxagoras regarded the sun as a burning stone or a red hot iron; and he was condemned to death by the clever Athenians (which sentence was commuted to exile by Pericles) for holding that the sun was as big as the Peloponnesus! Some moralists have supposed the sun-fire to be the place of torment for the wicked. Kircher made out the sun to be composed of the densest matter in the universe—we now know the contrary to be the truth—and that its mass formed an immense globe of molten metal. It was also taken to be melted gold in a constant state of ebullition. Huygens held the sun to consist of incandescent matter, but he felt uncertain whether that matter were solid or liquid. Newton believed the sun to be a solid opaque mass constantly emitting light and heat from the mouths of innumerable volcanoes. As a consequence, it might finally be exhausted and become extinct.

Wilson, Arago, and the Herschels held that the sun itself is not fire, but a black solid ball, enclosed in a photosphere or luminous atmosphere—several atmospheres, in fact, one within the other—exactly as the yolk of an egg is surrounded by the white, or the apple of a dumpling by the crust. Sir John Herschel has even peopled it with inhabitants, whose natural history will one day amuse our great-grandchildren.

Fontenelle had gravely stated the reasons why the sun has no inhabitants; which he regrets as a great pity. For, as he says, there is only one spot in the solar system where its study would be perfectly simple and easy; and just at that spot there is nobody living. All things considered, he adds, if the sun be inhabited, it can only be by blind people.

We might suppose that the solar salamander-men, with their knowledge of the difference between frying-pans and fires, must be more than a match for the gentleman who used to retire into a heated oven during his sulky moments; but William Herschel insists on the probability of the sun's nucleus enjoying quite a temperate climate, in spite of the incandescence of the upper atmosphere. Its inhabitants would be protected from the insufferable light and heat by the dense interior stratum of clouds, which is endowed with very considerable reflective power. The phenomenon of life might be manifested there, as it is on the surface of our globe; although, in all likelihood, it is admitted, under very different forms and conditions.

For this agreeable and benevolent theory,

the spots on the sun are answerable. They were first seen by the Jesuit Scheiner in 1611, who showed them to his confidential pupils, but dared not make his discovery public. Having fully satisfied himself of their existence, he consulted the Provincial of his Order, who thus expressed his incredulity: "I have several times read my Aristotle from beginning to end, and I can assure you he mentions nothing of the kind. Go, my son, and make your mind easy. You may be certain that what you take for spots on the sun are only defects in your glasses or your eyes."

The first fruits of the discovery of the spots was the determination of the sun's period of revolution on his axis. Scheiner's observation having been confirmed by Galileo, he at length plucked up sufficient courage to announce it to the world in a book entitled *Rosa Ursina*.

The spots on the sun are irregularly scattered about the regions adjacent to his equator. Near the poles, no trace of them is distinguishable. They are constantly varying in form, and appear in lesser or greater number, according to the years. Their apparition even manifests a certain degree of periodicity, and there would seem to be a close connexion between their production and certain terrestrial meteorological phenomena.

The portion of the solar disk which is free from spots is far from shining with equal brightness. The ground is lightly carpeted with a multitude of little black specks in a state of continual change. When a spot is observed with a high magnifying power, it is generally found to have a dark nucleus, almost black, surrounded by a greyish band, called the penumbra, and then, round the penumbra, by bands more brilliant than the rest of the surface, and supposed by Sir John Herschel to be the tops of immense waves which are symptoms of the violent agitation going on in the upper regions of the sun's atmosphere. The dimensions of the spots are sometimes enormous, their mouth being more than wide enough to swallow the earth whole, without biting it. The earth's diameter is only eight thousand miles; and Herschel measured a spot whose orifice was forty-two thousand five hundred miles across.

It was not enough to discover the spots; they had to be accounted for. Successive astronomers did their best; and, at last, Arago and the Herschels presented us with a complete theory. Every spot, they say, is a hole which penetrates from the outmost limits down to the very surface of the sun. The black nucleus we behold is the sun's soil or ground; the penumbra is a stratum of opaque and reflecting clouds; the brilliant bands constitute a superficial, incandescent, and very luminous atmosphere. With this set of atmospheres disposed one over the other, one acting as a screen, the other as an illuminator, and the dark dense mass of the sun at the bottom of all, the appearances of the spots are logically explained. But however ingenious the hypothesis,

some people think it too complicated to be true. The sun, they believe, is something simpler than that.

Nevertheless, the whole of the machinery by which the solar phantasmagoria is accomplished, is on a scale worthy of the star in which it is supposed to act. It is truly gorgeous and magnificent. Admit a score of active volcanoes—twenty score, a hundred score, or more, if needs be. Their combined eruptions cannot fail to rend the concentric atmospheres from top to bottom, and to produce more or less considerable holes. The inhabitant of the earth, peeping through his telescope, will behold through those cavities the dark ground of the sun, which is the nucleus of the spot; the penumbra, which is the stratum of heat-resisting clouds; and then the bright *faculæ*, which are tempest-waves of light in the photosphere. By making the eruptions tear the solar atmospheres in this way or that, you may account for every possible appearance. The distinguished names of the authors of this system forced it upon the learned world in spite of the world's incredulity. People are getting used to it now, and yield it the assent of custom, if not of conviction. Still, in astronomy, as well as in religion, there exist certain sceptical Zulus who do not implicitly take for granted everything they read or hear.

M. Faye, an able French astronomer, in two remarkable *Mémoires*, has collected fresh facts which deserve attention. A brief summary of their purport has been given by M. de Parville, in the *Constitutionnel* newspaper. Our readers may perhaps remember our recent mention of Spectral Analysis.* By dissecting light, Messieurs Bunsen and Kirchhoff discovered the means of ascertaining the substances contained in the source of that light. Brilliant and characteristic stripes, appearing in the prismatic spectrum, announced the presence of such and such metals. Each metal gives its own proper stripe, about which there is no mistake. This happens in the case of flame.

But if, behind the flame, there be placed a solid luminous source, like the electric light, for instance, the brilliant and coloured stripe which the metal gave is immediately replaced by a black stripe occupying exactly the same position.

Now, the spectrum of the sun's light is literally riddled and cut up by black stripes, whose signification was a puzzle, until the above experiment taught that each black stripe betrayed the presence of a metal. Nothing, therefore, appeared more simple than, by consulting this natural register, to find out what metals are contained in the sun. Pursuing this singular method with great practical minuteness of research, Kirchhoff detected the following metals in the solar atmosphere: Sodium (the base of soda), calcium (the base of lime), magnesium (of magnesia), baryum, iron, chrome, nickel, copper,

* See Photological Facts, chapter I., No. 307, p. 149.

zinc, strontium, cadmium, and cobalt. There appears to be no trace of gold, silver, mercury, aluminium (the base of clay), tin, lead, antimony, nor arsenic.

But this discovery is immediately followed by a most important corollary. For black stripes to show themselves in the solar spectrum, there are required, first, a burning gas containing metallic vapours; and, secondly, behind the lighted gas, a non-gaseous body in a state of ignition. As a natural consequence, the sun, according to M. Kirchhoff, can be no other than a solid or liquid incandescent globe, enveloped in an atmosphere of very dense vapours.

This conclusion is, however, open to a very serious objection. If the sun be solid, or even only liquid, the cause of his spots can exist only in his atmosphere; they must be merely superficial, flat. M. Kirchhoff has therefore revived Galileo's notion of the formation of opaque clouds in the solar atmosphere.

But, on the other hand, the best observations show unmistakably that the spots on the sun are real cavities. From stereoscopic views a clear idea is formed of the central hollow presented by each spot. It is impossible, supposing them superficial, to explain the striking and variable appearances presented by the solar spots. In this particular, the new theory accords ill with observation.

M. Faye reconciles the difficulty by recalling to mind Arago's famous experiment on the polarisation of solar light, by which he proved that that light must emanate from a gaseous medium. On the other hand, Messieurs Bunsen and Kirchhoff make the sun's light proceed from a liquid or solid incandescent nucleus. M. Faye gives a novel interpretation of the two experiments which causes the difficulty to disappear, thus: For Arago, the solar light emanates from an incandescent gas; while Kirchhoff holds that, behind the gas, there exists a solid source of light. M. Faye makes them agree, by observing that, doubtless, solid incandescent particles, suspended in a gaseous medium, act in the same way as a solid source of light, and so produce the black bands. Suppose the sun to be still in a gaseous state, and suppose solid particles of matter to be held in suspension in the gas, and the two contradictory experiments will mutually support each other. The sun, therefore, is not solid, nor even liquid, but gaseous; which quite accords with his feeble mean density, already referred to. The comets have been called "visible nothings;" the sun is a very visible and sensible "not much."

There is nothing, continues M. Faye, to distinguish our sun from the multitudinous stars which shine in the firmament. Astronomers readily admit that the sun is a star of middling magnitude, emitting light which is nearly white, with a very slightly marked character of periodical variability. We are therefore in the presence of a phenomenon which is undoubtedly of great importance to us, but which is at the same time extremely common in the stellar universe. Starting, therefore, with the simplest and

most general idea, and the one most applicable to the aggregate of stars, we have the successive union of matter in vast masses, under the empire of attraction, out of the materials primitively disseminated throughout space.

The star is in the state of a nebula; but at length a cooling takes place at the surface: the disunited elements gradually acquire the power of approaching each other, and chemical affinities are developed. The particles thus formed, acted on by gravity, will descend towards the lower strata, where, meeting with the temperature of dissociation, they will be sent up again as masses of gas. There are thus produced vertical movements of reciprocal exchange, which incessantly renew the emission of heat and light. At the outer circumference will be formed the apparent limit of the sun. The vertical currents which agitate the mass easily explain the appearances of the spots. Wherever the ascending currents find an outlet, they open a sort of vista into the interior, which appears to the eye comparatively black, in consequence of its lower radiating power. Father Secchi ascertained, by means of thermo-electric measurements, that the central portion of the spots on the sun is less hot than the superficial region.

It would appear then, if M. Faye's views be correct, that a star passes through several perfectly distinct phases. The first is the nebulous condition, in which our sun no longer remains. In the second phase, the outer strata are sufficiently cooled to allow the play of certain molecular affinities to be possible. There is then formed a sort of superficial laboratory, which determines the apparent outline of the star. The emission of light and heat is considerable, and is maintained at the expense of the entire mass by the action of ascending and descending currents which are established between the deep strata and the surface. This phase lasts for an immense lapse of time, and presents great fixity in its phenomena. Our sun is now passing through this very phase. The vertical currents in his mass suffice to account for every appearance hitherto observed.

The third phase arrives when, in consequence of cooling, the vertical movements begin to slacken; when, the entire mass gradually contracting, the luminous surface little by little acquires a liquid, a pasty, and finally a solid consistence. From this condition, the sun is still far distant. By continued cooling, at last come the phenomena of definitive extinction. Although the interior may be incandescent, the exterior is covered with an opaque, cool, and habitable crust. This is the geological phase.

Examples are recorded in history. The seventh star of the Pleiades, after languishing for centuries, went out at the fall of Troy. Hevelius, a celebrated German astronomer, mentions five stars whose expiring rays he had the glory and sorrow to catch in his telescope. Herschel, after ascertaining the disappearance of a notable number of stars, by the comparison of ancient with recent catalogues, had also the

honour of being present at a star's last moments, and of registering its decease. It was the fiftieth of Hercules. For some time past he had observed it growing paler; it then turned red; and after flickering some dozen years, it yielded up its flame, and disappeared for ever in the shades of night. The 24th of March, 1791, was the date on which the great astronomer entered this remarkable phenomenon in his journal.

The earth and the moon, we are told, offer examples of this successive evolution. Evidently, the earth was once a veritable sun for the moon. The moon, whose mass is very much smaller, was naturally the first to cool. Then the earth, in her turn, after passing through the very same phases as our actual sun, at last acquired a crust and became entirely solid at the surface. After a fresh considerable lapse of time, organic life became manifested. The same transitions have been passed through by the moon, only much more rapidly.

It is probable that life was developed in the moon when it had scarcely yet appeared on earth. We are informed that the moon represents the earth's future, the sun her past. We are behindhand with our satellite, and very much in advance of our sun. And thus, worlds have their distinct ages and their corresponding conditions of life. Each star passes through its successive transformations in the eternal harmony of the universe.

TIMKINS'S TESTIMONIALS.

WITHOUT being exactly a fatalist, I am inclined to believe that certain men are born to a certain fate, the tendency to which they cannot help, because it is inherent in their nature, just as the inclination of the mariner's needle is towards the pole. I don't think that the destinies of *all* mankind are ruled in this way, but that there are certain special people of a particular kind of whom fortune takes the sole direction, giving them no voice whatever in their own affairs. These people are launched upon the sea of life with their sails set and their rudder lashed up for a fixed course; and off they go before the gale, without the will or the power to alter their path. If the rudder be fixed to steer them through calm waters into peaceful havens, thither they will go: if set to run them upon rocks and shoals, they are as inevitably driven to their destruction.

The kind of people who are thus handed over, bound hand and foot, to their destiny, are those persons—with whom we are all acquainted—who make themselves conspicuous in society by uniform prosperity or adversity, both apparently unmerited. There is Jones. How that feeble-minded individual, with a brain no larger than a walnut, contrives to make five thousand a year, is a perpetual marvel to all who know him—to be an idiot! There is Smith. He is equally a phenomenon; because, with a large share of natural ability, he is unable, even under the most favourable circumstances, to earn a pound

a week. Everything which he puts his hand to fails; every bud of promise withers at his touch. Whereas the stupid Jones makes trees grow out of the arid sand, and turns mud and rubbish into gold!

In many cases, no doubt, the success of the one and the failure of the other are easily to be accounted for. Jones, though stupid, is a steady going plodder; Smith, though clever, has a too vaulting ambition, which constantly lands him on the other side. But there are instances where their success or failure cannot be traced to any known cause whatever. There is a kind of man who succeeds spite of every disqualification for his work, and there is another kind of man who fails in the face of the most brilliant talents and the most splendid opportunities.

I believe that fortune has magnetised these people, and that the one turns to the good pole and the other to the bad pole, by the force of an attraction which they cannot resist, and which lies outside the scope of their control.

We are all acquainted with fatuously fortunate persons who are always "coming into money." They toil not, neither do they spin; yet they are constantly renewing their splendour with the means of deceased relatives. The brother who goes to the Indies, makes a fortune and dies intestate, leaving his rupees to be fortuitously inherited by the next of kin, patiently waiting on Providence in England, does not so much fulfil his own destiny as the destiny of his next of kin. He is but a worm who spins the silken robe for another, and, when he has fulfilled his mission, dies. There is the old maiden aunt, who lives a life of toil and self-sacrifice, only to complete her destiny, when she leaves her little savings to her nephew, Fortunatus. There are relatives and distant connexions who would see Fortunatus hanged before they would leave him a penny. Yet Fortunatus comes in for their real and personal estate, spite of all attempts to cut him off without a shilling. He has no need to plot and conspire and forge documents. Happy circumstances save him the trouble. He lies lazily on his back under the tree of fortune, and the fruit when fully ripe drops into his open mouth.

Let me also instance the lucky individual who always manages, without any design or a forethought, to take the long lease of a house, whose site is destined to be required for a railway. Compensation pursues him everywhere. If he were to settle on the top of a hill, it would come up to him by means of a viaduct; if he were to pitch his tent in a deep valley, it would burrow through the bowels of the earth, to lay its golden treasures at his feet. Let another person be never so cunning in selecting a location, and, when he has calculated the chances to a certainty, compensation will pass him by by a yard's breadth. This latter class is as fatuously unlucky as the other is lucky. I am reminded of my old friend Muddleton, who always contrives to be in the train which

runs over the embankment, in the steam-boat which blows up, in the cab which breaks down, and a depositor in the bank which stops payment.

And now I come to Timkins and his Testimonials.

Fortune has various ways of showing her favours. She has all sorts of prizes in her lucky bag. Timkins draws Testimonials. He is magnetised for that sort of thing. Whenever they come within the sphere of his influence, silver cups, and tea-services, and candelabra with suitable inscriptions, fly to him, like tin tacks to a magnet. Not that Timkins deserves these things. On the contrary, a more undeserving person than Timkins does not exist. I have been acquainted with Timkins now for twenty years, and I know him to be a man utterly incapable of efficiently performing any function whatever. I have so poor an opinion of his intelligence and his honesty, that I would not trust him to post a letter for me. If I were to give him a letter, and a penny, and say, "Timkins, oblige me, as you go along, by putting a stamp on this letter, and posting it for the country," I should fully expect Timkins to put the letter in his pocket, and forget all about it, and spend the penny in nuts! And I should not be disappointed. Did you ever know a man who bought pennyworths of nuts, and cracked them with his teeth, and ate them as he went along the streets, who wasn't one of Nature's supernumeraries? In the great Drama of Life he can scarcely be trusted to carry a banner.

The chief distinction of Timkins is that he has, during his career, mismanaged everything he has taken in hand so entirely to the satisfaction of his employers, as, on every occasion, when he has been dismissed from his office, to receive at their hands a testimonial expressive of high regard and esteem.

Twenty years ago, when a new bank was started, and a new manager was required, the directors with one voice mentioned Timkins as the man for the post. Timkins was installed, and the shareholders were congratulated. At the end of two years the accounts were found to be in a state of hopeless confusion; and a reckless system of making advances without adequate security had reduced the concern to the verge of bankruptcy. In Timkins's private drawer were found bills for many thousands of pounds which had never been presented, and a heap of nutshells! What did the directors do? Why, at their very next meeting, they said with one voice, "Timkins must have a testimonial." And on dispensing with his services, the directors presented Timkins with a silver tea-service, duly inscribed with his name, and a gratifying allusion to his eminent services.

When it was bruited abroad that Timkins had received a testimonial, and was "at liberty," there was immediately a hot competition to secure him for other large concerns. Directors and shareholders tumbled over each other in the street in their mad race to get hold of the

eminent Timkins and engage him on the spot. A gentleman interested in a building society was the lucky individual who won the race, and found Timkins quietly waiting on Providence and cracking nuts. Timkins was carried off in triumph, and immediately thrust into the secretarial chair of the Every-Man-his-own-Landlord Building, and Safe-as-the-Bank Investment, Society. Guided by the sagacity, and acting on the advice of, Timkins, the society purchased a marsh and (with due regard to economy, dispensing with drainage) built houses upon it. In due time the houses were allotted, and at the end of two years all the occupants, save one who had a preternatural constitution, died of ague!

Timkins was immediately invited to a complimentary dinner, and after the cloth was drawn his health was proposed, and the surviving members of the society begged his acceptance of a silver urn as a small token of the high esteem in which they held him as a man and the manager of their affairs. When the urn, which, during the feast, had remained a corpse-like mystery under a white sheet, was gently unveiled, Timkins said he was completely taken by surprise, which was no affectation, but the real truth, for it had never entered Timkins's mind to conceive that he had merited a testimonial; nor had he any share in promoting it. When the society was eventually wound up, and the funds were divided, as far as they would go (which was not far), Timkins received another testimonial from his clients in the shape of a portrait, in oil, of himself, his right hand grasping a scroll (probably the title-deeds of the houses on the marsh), and his left resting upon the works of Adam Smith in one vol., lettered large on the back.

When Timkins conferred further lustre upon himself by becoming bankrupt and giving up forty-eight pounds and his household effects to his creditors, the commissioner complimented him on his honourable conduct, allowed him five pounds a week out of the estate pending adjudication, and eventually, there being no opposition, gave him a first-class certificate. On leaving the court without a stain on his character, Timkins was shaken by the hand and congratulated by all his creditors, who, before the week was out, returned to him the household effects and testimonials which he had so honourably given up, accompanied by an address on vellum highly laudatory of his integrity, and wishing him all prosperity in the future.

It was never my good fortune to have any personal dealings with Timkins until this auspicious epoch of his career. It happened however, at this time, that our Benevolent Society, with which was combined a Philosophical Institute, wanted a secretary. Whom shall we get to take charge of our affairs? was the momentous question which agitated the committee-meeting of our society, when a member, laying down the evening paper in which he had been reading an account of Timkins's bankruptcy, solved the problem by mentioning the magic

name of Timkins. By what process of reasoning we arrived at the resolution, *nem. con.*, that Timkins was the man for our money, I am wholly unable to say; but certain it is, that we did come to that resolution, and Timkins was appointed. It may have been that, overlooking the main circumstance of the case, *viz.* bankruptcy, we were entirely carried away by the compliments paid to Timkins by the commissioner, and the gratifying fact that, though Timkins had not paid anything worth mentioning to his creditors, he nevertheless had left the court without a stain on his character.

Timkins proved to be the man for our money, as we anticipated. Our former secretary had enforced the rules of the society with so much strictness and so little discretion, that many members were compelled to resign, while others formed themselves into a league to resist what was stigmatised as the sharp practice of the management. Under the milder sway of Timkins, all cause of discord disappeared. No one forfeited his membership, there was no complaint of a harsh enforcement of the rules, and all went pleasant with us—until the first audit.

The two auditors, when they came forth from the back office, where they had been closeted with Timkins for five hours, examining vouchers and balancing the accounts—the two auditors, I say, when they presented themselves in the committee-room, appeared to be radiant with satisfaction. What it was that caused them so much inward joy we were duly informed when the accounts had been passed—the total at the bottom of the credit side was precisely the same as that at the bottom of the debit side, so it was all right—and a vote of thanks had been passed to Timkins by acclamation.

When Timkins, flushed with honest pride, had retired to his domestic hearth, there to share his gratified feelings with the partner of his bosom, the auditors, unable to withhold the joyful tidings any longer, informed us that the rules had never been enforced at all, that half the members of the society were in arrear, and that Timkins, after having had every allowance given him for postages, sundries of various kinds, and vouchers which he had lost, was indebted to the society in the sum of fifteen pounds eight and sevenpence. This announcement was quite enough to excite the sympathies of all of us. If we had heard that Timkins had been instrumental in reducing our taxes, in emancipating us from some dreadful bondage, in sustaining the glory of our arms in foreign parts, in scattering our enemies and making them fall—if, in fact, we had been assured that Timkins was the greatest benefactor that we and the human race had ever had, we could not have been more spontaneously of opinion that he deserved a testimonial. The way in which we all said at once, "Timkins must have a testimonial," was suggestive of a passage in a chorus, "rendered with great precision."

Timkins, having at this time manifested a taste for scientific pursuits in the entomological direction, it was proposed by a committee-man

of kindred sympathies that our testimonial should take the form of a microscope, and, there being among the other members, not scientific, a vague notion that a microscope was a thing that cost about eighteenpence, the proposal was agreed to with alacrity. To our great surprise and dismay, however, the microscope, when sent home by the optician, turned out to be a huge machine with brass wheels and funnels like a miniature steam-engine, and cost, with its mahogany case and complimentary inscription, eleven guineas sterling. Nevertheless, we paid the money cheerfully, and presented the testimonial to Timkins, who thanked us from the bottom of his heart, and said that he would never forget the day, &c. I have only to add that Timkins is still "the man for our money," to the extent of fifteen pounds eight and sevenpence, and I am sure none of us would be mean enough even to hint to him that he was bound to make good the deficiency.

That Timkins may live to receive many more testimonials in token of his eminent inefficiency in every relation of life, is my earnest wish. I am sure there are hundreds of silver teapots and elegantly-chased goblets dying to be inscribed with his illustrious name, and on the very slightest pretence to throw themselves into his arms.

ANTLERS.

DEER are four-footed mammals, chewing the cud, and having horns which fall off. The Latin nations call them "necks." Remarkable for the length of their necks, they are called *cervide*, *cervi*, *cerfs*, from the Latin word for neck, *cervix*. When men or women with notably long necks pass among the promenaders of the Elysian Fields, in Paris, on Sundays or holidays, lively Parisians may be heard calling upon their companions to look at a "*cerf*." The English word *deer*, the students of language tell us, changing according to Grimm's law, is in Gothic *dus*; in Old High German, *tior*; in Anglo-Saxon, *deor*; in Greek, *thēr* or *phēr*; and in Latin, *fera*, signifying a wild beast. The English word *forest* is derived from the Latin *fera*, and did not, in old times, any more than in the highlands of Scotland at the present day, mean a great wood, but a chase for wild beasts or deer.

Deer are cud-chewers. Belonging to the backboneed division of animals, and having teats, they are included in the first great group of this division, the mammals, whilst the characteristic of chewing the cud arranges them apart with a smaller group represented by deer, sheep, oxen, goats, and camels. Nearly all the cud-chewing animals, instead of cutting teeth, have pads in the upper jaw. When browsing on leaves, or grazing on grass, they press the leaves or grass against the pads, and cut them from below, with the front or incisive teeth of the lower jaw. They do not bite their fodder as we do our food, with cutting-teeth above and below; they cut it

from below against a pad, as we do our bread from above against wooden trenchers. Goats, antelopes, camels, giraffes, as well as deer, show the build which adapts them by raising their heads high up for browsing upon the leaves and sprouts of shrubs and trees. Their tongues are their hands, taking or catching instruments, serving them as their trunks serve the elephants. They take their fodder with their tongues, pads, and cutting teeth, and they chew it with their grinders or molars while kneeling down upon the ground, with looks of sleepy satisfaction. Endowed with four sacks in their stomach, they shake up the fodder and chew the "cud," which means chew the chewed. The stag shakes up his fodder from his first sack or stomach, with violent shakes, into his mouth; but most cud-chewers, or ruminants as they are called in Latin, get up their leaves or grass with little difficulty, except when they have eaten too much. And the tongue of a deer is not so awkward a hand as might be supposed, for it can stretch above his eyes.

Cud-chewing is a mark which separates a group of mammals, including the deer; but it is not a character special to the deer themselves. A characteristic of the deer is their falling horns. The growth of the horns of deer is indeed one of the wonders of life. Worship, somebody has said, is the expression of wonder, and many poets have expressed the wonder mankind have felt on seeing and considering the horns of deer. The poet Waller expressed this wonder in reference to the gigantic Irish deer. Professor Owen says: "The great extinct Irish deer surpassed the largest wapiti, or elk, in size, and much exceeded them in the dimensions of the antlers. The pair first described and figured in the Philosophical Transactions measured ten feet ten inches, in a straight line, from the extreme tip of the right to that of the left antler; the length of each antler, from the burr to the extreme tip, in a straight line, was five feet two inches, and the breadth of the expanded part, or palm, was one foot ten and a half inches." Waller's lines run somewhat into hyperbole at last; but, on the whole, the astonishment they embody is as just as it is strong:

So we some antique hero's strength
Learn by his lance's weight and length;
As these vast beams express the beast
Whose shadowy brows alive they drest.
Such game, while yet the world was new,
The mighty Nimrod did pursue.
What huntsman of our feeble race,
Or dogs, dare such a monster chase?
Resembling, at each blow he strikes,
The charge of a whole troop of pikes.
O fertile head! which every year
Could such a crop of wonder bear!
The teeming earth did never bring
So soon, so hard, so huge a thing;
Which, might it never have been cast
(Each year's growth added to the last),
These lofty branches had supplied
The earth's bold son's prodigious pride:
Heav'n with these engines had been sealed,
When mountains heaped on mountains failed.

At page 209 of number 185 of this Journal will be found an essay on Bone-making. A perusal of it will greatly help the reader in understanding horn-making, and save me the task of repeating what was said there in reference to the periosteum, a perfectly marvellous membrane which becomes bone in the most extraordinary circumstances. The growing horn of the deer is covered with a skin called the "velvet," and this skin is the covering of the membrane or periosteum which becomes the horn.

The falling horns of the deer, have two contrasted shapes, the round and the flat. The roebuck, and red deer have round; and the elk and fallow deer flat horns. At six months old the male calf of the red deer has already his "bosets;" during his second year they become "dags," and the calf is then called by the French a "daguet," and by the English a "brocket." The "spayard" or third year calf has two or three "tynes" on his dags. At four years old, the "staggard" is distinguished by the spreading of the crown of his horn into branches; and when these amount to five in the fifth year, he has grown into a "stag." When six or seven years old, the stag becomes a "hart" with "tynes," of a very variable number. The growth of the flat horns of the fallow deer and reindeer is similar. After being successively "buckfawn," "pricket," "sorel," and "sore," in the fallow deer of the fourth year the antlers become more numerous, and their stems bifid or cleft. Antlers, or the branches of the deer's horns, is a name derived from the preposition of the Latins, ante, before, or from a common source. Pages might be filled with quotations from poets expressive of admiration for antlered deer. Longfellow, describing the best beloved of the friends of Hiawatha, says:

Beautiful and childlike was he,
Brave as man is, soft as woman,
Pliant as a wand of willow,
Stately as a deer with antlers.

Hiawatha waiting for the deer he is hunting is a beautiful picture.

Hidden in the alder bushes,
There he waited till the deer came,
Till he saw two antlers lifted,
Saw two eyes look from the thicket,
Saw two nostrils point to windward,
And a deer came down the pathway
Fleck'd with leafy light and shadow.

The growth of bones, teeth, nails, claws, scales, shells, hairs, spines, feathers, quills, and unfalling horns, must all be studied and understood before clear and discriminating notions can be formed of the growth of antlers, yet I will try to give my readers a correct, though general, conception of it. Deer shed their horns after the extremest cold of winter is gone, when the temperature has reached its lowest point, and turned towards spring and summer warmth, while the snowdrop is peeping up, the crocus spreading its yellow bloom, and the violets and

polyanthuses opening their petals. Spring, which sends the skylark into the sky to sing, and wakes the melodies of the tree-lark, and the newly come chaffinch in the leafless trees, sends hot arterial blood gushing up into the heads of the cervine race. A new membrane destined to be converted into horn develops itself, pushing away the old horn, and the spayard drops his dags, the stag and the hart their horns with antlers. The deer's antlers are more like the matrices of the horns of the other cud-chewers, sheep, goats, and oxen, than like the horns themselves. The base of the deer's horn rests upon a small frontal knob on either side of the head, from which it is separated by the "burr," a bony circular and serrated projection. When about to fall off, the bony part of the frontal tubercle or knob softens all over the place between it and the horn. A new frontal protuberance then grows rapidly, which is covered with a soft hairy skin called the velvet. This is the growing horn. Full of arterial blood, the rapidly developing membrane, or soft periosteum, is in this condition eaten uncooked as a dainty like an oyster. The beating and throbbing of the blood in this membrane, as perceived even by the hand when laid upon it, is something startling. According to the age of the deer, as I have already said, the cellular membrane becomes a dag, or a horn with tynes. When it has reached its appointed size and shape, the burr hardens, or ossifies, grasping, enclosing, and restricting the blood-vessels, where the horn rests on the head. Then the membrane, by solid deposits, quickly becomes cartilage, and the cartilage bone; and the horns and antlers are complete in autumn, when the stags and harts need weapons to settle their quarrels, or defend their does and hinds. For, the autumn is their love season. The periosteum, with its blood-vessels, has been converted into horns and tynes, and the velvet is no longer needed. Deprived of nourishment, this skin shrivels, splits, and hangs in strips, which the stags and harts rub off against trees. The velvet is a continuation of the skin of the head, the periosteum a continuation of the membrane which forms the skull, and the horn is composed of bony elements.

The rapidity of the growth of such masses of bony formations has always been a theme of wonder; for bones grow slowly, and horns quickly. Ten days push the horns of the wapiti up several inches; and in five weeks they have a span of two feet. Antlers weighing sixty or seventy pounds grow in ten weeks.

The annually falling horns of deer will naturally recall to mind the analogous characteristics of birds which moult, and crustaceans and reptiles which cast their shells and skins every year. The word horn is equally applied to the weapon of the ox and the stag, but they are very different things. A good idea of the difference will be obtained by supposing the dried up periosteum inside a quill or feather to have been solidified into bone.

Respiration is an operation in which black

blood becomes red or dead blood alive, and the horns of deer develop according as their blood vivifies. The stag is more reproductively alive than the brocket, and the hart than the stag. A Canadian stag developed a miserable little horn during a voyage from America; but a comparatively handsome one with five tynes when well fed in a French menagerie. In the Museum of the College of Surgeons there is exhibited the horn of a fallow deer which, in consequence of a vital mutilation, was hideously deformed in its growth, and did not fall off at the usual time. The flat or palmated horn, it is thought, has been given to the deer of northern climes to enable them to shovel off the snow from their fodder of twigs or grass.

Deer are a very well defined group of beasts, but their classification as species has apparently hitherto baffled all the makers of systems. The horns have been tried, but will never do. The horns of the same individual differ greatly one year with another. As for the horns of different individuals of the same species they differ vastly. Horns seen in museums have always been selected because they are fine specimens of their kind; but the horns imported in shiploads for the use of the cutlers, show how various and different they may be in individuals of the same species. It is, indeed, only a weak classification, which can be based upon the marks peculiar to the stags and harts without noticing the characteristics of the does and hinds.

Deer bury their horns. Loch Chabar, the lake of horns, near Fort William, derives its name from the number of horns found in the soft black peat moss of its banks. Recently, cast horns are frequently found imbedded in earth. As spiders eat their webs to obtain the materials of their silk, deer often gnaw their horns for sulphate of lime to harden their bones and antlers.

Buffon, who was rather an eloquent writer than an accurate observer on natural history, suggests that the horns of deer are in some sort trees: the molecule of the twigs and leaves on which the stags browse, after nourishing them, resuming their previous and arboreal arrangements!

Deer are not the only ruminants which have what the French call "larmiers," and the English "tearpits," under their eyes, which, however, it is now known, shed no tears. The poets have given expression to this old error. Shakespeare, in *As You Like It*, says:

The big round tears

Coursed one another down his innocent nose
In piteous chase;

and adds, the hairy fool augmented the swift brook with tears! Thomson, to excite pity for a stag at bay, says:

The big round tears run down his dappled face.

Poets are but echoes. The statements which they make are seldom their own, being generally only what is popularly believed in their day. The naturalists were the authors of this error, and yet it is almost always corrected by modern

physiologists, as if it were an error of those at whose opinions they have a right to sneer, the poets. Why, the error was committed by pretentious savants of former times, and the poets have only been guilty of putting it into beautiful and melodious words. It is all very well for the naturalists to try to set up a system of flogging a poet whenever a naturalist makes a mistake, as George Buchanan was birched whenever King Jamie was guilty of a blunder in his lessons. As to the real functions of what are now called "the sub-orbital sinuses," the physiologists confess they know nothing in the present day.

The functions of the so-called tearpits are not the only things respecting deer which puzzle the students of animals, for nobody can classify them. Horns, teeth, and fur, the muffle or swelling on the upper lip, and the glands in the hind legs, have all been used in arranging them by eminent zoologists, but without scientific success, for the last grouping published of them divides them geographically, in despair of a zoological arrangement, into the deer of the snowy regions and the deer of warmer climes. Fourteen species are mentioned in the list of the Zoological Gardens; but the specimens there, however fine some of the individuals may be, cannot be said to represent adequately the forty or fifty species described by different authors. Besides the British red and fallow deer, there are in the Gardens deer from North America, Barbary, Persia, Himalaya, Formosa, India, Molucca, and Mexico. Deer of snowy countries have broad hairy muzzles, with flat or palmated horns; and deer of warm countries have tapering muzzles, with bald muffles. The three British species are the fallow deer, red deer, and roebuck. The fallow deer is the kind common in parks. There are still a few red deer in out-of-the-way places in Ireland, or, at least, there were when the late Mr. Thompson drew up his report on the fauna, and they are still pretty numerous in Scotland, although they are every year losing there more and more the character of wild, and acquiring the characteristics of preserved animals. The roebuck is unknown in Ireland and rare in England, but still roams wild in the far Highlands. English fallow deer are of two varieties, the deep brown and the dappled, the latter, it has been supposed, acclimated from the south and the former from the north of Europe. The red deer is larger than the fallow deer, besides differing in the horns, and is of a brown or dun-colour, with a pale spot upon the rump. The roebuck has erect round horns, with short reddish hair in summer, and long blackish hair with yellow tips in winter.

But even if the zoologists had supplied satisfactory marks for discriminating all the species of deer, this would not be a proper place for describing them, but some contrasted kinds may be mentioned to enlarge our conception of their differences. Size has much to do with determining species, although the greatest contrasts of size often exist among individuals of identical species. The Corsican deer, for instance, is a red deer dwarfed by hunger. Gene-

ral Tom Thumb, who, if I remember rightly, is twenty-six inches high, is identical in species with Seng-woo-bah of Fychow, who, it is said, can with ease look over a wall seven feet and a half high. The conditions in which successive generations grow up make the most astonishing differences between individuals. Yet size is a characteristic of species. For each species there is a certain mean size to which both great and small specimens naturally revert. There are, therefore, it is beyond doubt, startlingly large and startlingly small kinds of deer, which have yet to be brought together in contrast and exhibited to the wonder of Europe.

John Josselyn, gentleman, author of *An Account of Two Voyages to New England*, published in 1674, appears to have been severely tried by the incredulity with which his description of the size of the North American moose or elk was received by his contemporaries.

"The moose or elke is a creature, or rather, if you will, a monster of superfluity; a full grown moose is many times bigger than an English ox, their horns, as I have said elsewhere, very big (and branch out into palms), the tips whereof are sometimes found to be two fathom asunder (a fathom is six feet from the tip of one finger to the tip of the other, that is, four cubits), and in height from the toe of the fore feet to the pitch of the shoulder twelve foot, both which hath been taken by some of my *sceptique* readers to be monstrous lyes. If you consider the breadth that the beast carrieth, and the magnitude of the horns, you will easily be induced to contribute your belief. And for their height, since I came into England, I have read Dr. Schröderas, his chemical dispensatory, translated into English by Dr. Rowland, where he writes, 'that when he lived in Finland under Gustavus Horn, he saw an elke that was killed and presented to Gustavus his mother, seventeen spans high.' So you now, sirs, of the glibbing crue, if you have any skill in mensuration, tell me what difference there is between seventeen spans and twelve foot. There are certain transcendentia in every creature, which are the indelible characters of God, and which discover God; there's a prudential for you, as John Rhodes, the fisherman, used to say to his mate Kitt Lux."

More than a hundred and fifty years after Mr. Josselyn thus protested for verity, Mr. Catlin came to London to make known the marvels of North American Travel. And Mr. Catlin said he once found at the foot of the Rocky Mountains a pair of antlers, which he set up on their points as an archway, and the tallest man of his party walked under them without touching them. If this confirmation should come under the notice of a medium who would kindly make it known to the ghost of Mr. Josselyn, it would no doubt be received with much jubilation.

So much for large deer; and now it may be mentioned that there are small deer not much larger than English hares. The Brazilian *Gouzuvira* is only twenty-six inches long, with brown hair tipped with white on the back, and whitish

cinnamon on the lower part of the breast, and with a face like a sheep. In Ceylon, milk-white specimens of little deer are found sometimes, which have been, it is supposed, called the moose deer, on account of the smallness of their size, from the Dutch word *muis*, or mouse. "Here is a creature," says Robert Knox, "in this land no bigger than a hare, though every part rightly resembleth a deer. It is called *Meminna*, of a grey colour with white spots, and good meat." "Its extreme length," says Sir James Emerson Tennent, "never reaches two feet, and of those which were domesticated about my house, few exceeded ten inches in height, their limbs being of similar delicate proportions." It can inflict a severe bite. An accident which befel a milk-white *maminna*, prevented its being sent as a present to the Queen, in 1847. Five milk-white deer were found in the palace when the English took possession of Kandy, in 1803.

THE LOTTERY DREAMER.

IN FOUR CHAPTERS.

CHAPTER IV. THE TERNO.

It was a Friday evening, about a month after the day of the "merenda" in the Cascine and the conversation following it, which has been recorded in the last chapter. And the same four persons were once again together in the little shop on the Ponte Vecchio. Upon this occasion, however, the party of four was not divided into two pairs as had then been the case, but were all assembled in the larger front shop. Carlo's proposition had been duly made to the old jeweller, as had been projected; and the result had fully confirmed the sagacity of his judgment on the subject. As soon as old Laudadio had been made to understand that it was intended to assure to him a home and maintenance, together with unbounded command of his own time, and ample leisure for pursuing studies which had become his master passion, he jumped at the proposal. All the feelings which would once have arrayed themselves in opposition to it—the citizen's pride, the artist's pride, the householder's pride—had long since died out under the blighting encroachment of the one domineering thought, like the healthful vegetation that perishes beneath the baleful shade of the upas-tree. Carlo had judged rightly. The lottery, which had killed so much else, had killed all these things in the old man.

The proposed arrangements, therefore, had all been brought to bear prosperously. The marriage of Carlo and Laura was fixed for the following Sunday. It was to take place in the quiet little church of Santo Stefano, which serves as a parish church for the houses on the northern part of the bridge. After some delay and trouble the necessary papers and certificates were all in order. Carlo, like most others of his class and generation, had not been near a confessional box for a long time. But it was necessary to do so,

and to have a certificate to that effect, before he could be married. And he had, not without considerable repugnance, gone through the ceremony, and obtained his papers accordingly. On the morrow the necessary agreements between him and old Vanni were to be formally executed before a notary; and the neat tablet, with the words, "Carlo Bardi, Jeweller and Goldsmith," in letters of gold on a blue enamelled ground, which had been duly prepared, was to be put up over the narrow little door, in the place now occupied by the half-effaced and faded name of Laudadio Vanni, which had been written there in old-fashioned black letters on a white ground more than half a century ago. This morrow, in short, was to be a very busy day with Carlo. The goods in which he had invested his little capital for the stocking of his shop had all been purchased, some in Florence, and some in Paris. The latter were still in the custom-house; some of the former not yet delivered. But Carlo hoped to have them all safe under his own roof by the Saturday night, and looked forward to a long day of hurry and bustle. Laura was to be equally busy in receiving the goods, arranging, cataloguing, and examining, all day long.

This Friday evening, therefore, was the last quiet hour before the marriage, and the last of the old jeweller's life as a householder and master tradesman. His life-long friend, Niccolo, had accordingly chosen this evening to bring his congratulations—and the bride's dowry.

"Here they are, my friends," said the cavalieri, producing two long rouleaux wrapped in paper, that looked as yellow as an old man's life-long treasured packet of love-letters; "here they are, two fifties, just as I rolled them up something like twenty years ago. They have never been touched since, though many a time there has been sore need of them. But trust old Cola Sestini for that! Sure bind, safe find! And now, Laura mia," he added, as he put the heavy rolls into her hands, "there they are, and the keeping of them is off my mind."

"You know, Caro Signor Cavaliere," said Laura, "that grateful as Carlo and I are for an assistance so important to us, there is little more to be said about it than we ought to say every day. For God knows how things would have gone with us but for you. You must be tired of being thanked, and anybody else would be tired of doing the good deeds to be thanked for. Here, Carlo," she added, as she put the packets into his hands, "you have not to learn now all that my godfather has been to me."

"Thanks, Signor Cavaliere, for my Laura's dowry," said Carlo, as he got up to take the money, extending as he did so his right hand to the old man, "and a thousand times more thanks for your approval of our marriage. I will lock up the dollars, and leave them yet a little longer in their old wrappings. But I am afraid that their long repose is very nearly over."

And so saying, Carlo proceeded to place the two rouleaux in an iron-doored strong safe, con-

structed in the thickness of the wall, just opposite to the staircase, which opened in the doorway between the front and back shop. Carlo turned on them the massive key of the safe, and put it in his pocket, thus exercising the first act of mastership of the house.

"Godfather, thirty-seven; dower, twenty-five; marriage, twenty-eight," cried Laudadio, rising from his old arm-chair in great and evident excitement. "The very numbers! The numbers I—" He checked himself, looking round on his three auditors with a sharp glance, half timid, and half suspicious; but continued, as he paced to and fro the few steps to which the limits of the little shop confined him, muttering to himself, "Was there ever a clearer indication? It satisfies all the rules. All, all! This at least is clear. At last! at last! And yet—Friends," continued the old man, reaching his hat from the peg on which it hung, "I must go out for a short time. I shall not be long. I will be with you in half an hour. Cavaliere, I shall find you here when I come back?"

Old Sestini and the young couple glanced at each other as the old man left the shop, and the former was the first to speak.

"They did come pat enough, the three numbers, it must be owned; didn't they, now? and all on the same subject, too, as one may say: godfather, dower, and marriage! Well, that *is* remarkable! Who knows, who knows!"

Carlo shrugged his shoulders, with an expression which consideration for Laura barely sufficed to keep half way between contempt and pity.

"Has he any money in his pocket, Laura?" asked he; for the errand on which old Laudadio was gone was evident enough to them all.

"Not more than a paul or two, dear Carlo, I know for certain," replied Laura; "and to-night, you know, for the last time, you won't object—"

"Nay, Laura mia, I say nothing," rejoined Carlo, rather sadly; "but as for the *last time*, I hope your father has some years of life before him yet; for a lottery player there is no *last time* till his own last hour."

"It would be hard on Vanni if he had not a ticket for to-morrow," remarked the cavaliere. "The drawing takes place in Florence, and it must be much pleasanter to see the numbers come up, one by one, than merely to read them all in a lump, two or three days afterwards. Besides, who knows? as my old friend so justly observed, I have great confidence myself in Laudadio Vanni's science. Such a head as he has!"

"But you don't avail yourself of the suggestions indicated by his science, Signor Cavaliere," said Carlo, with a dash of satire in his tone, which was quite imperceptible to the worthy ex-clerk.

"I? No, I don't. Why should I? Don't you see, Signor Carlo, I have got my crust, my cup of coffee, and my cigar, sure and safe, every day, as sure as the sun rises. I *might* lose them

if I were to play ever so wisely. And I could not make Sunday begin over again, when Sunday night is come, if I won the biggest terno ever played for," said the old cavaliere, with more philosophy than he guessed.

Meantime, Laudadio Vanni did not go at once, as his friends supposed he would, to the nearest lottery office, and there empty his pockets of their little all in exchange for a scrap of paper. He was in too high a state of nervous excitement for this. Those three numbers, which he had so promptly matched with the things to which they are appended in the cabalistic volume described in a former chapter, had, as he, correctly or not, persuaded himself, occurred to him in his dreams. It was, indeed, likely enough that they might have done so. The three ideas with which his "science" connected them had of course naturally enough been in his thoughts lately. And as his morbid mind incessantly and habitually fixed itself upon the numbers suggested by every incident, every object, and every idea which presented itself to him, and as these numbers were the continual subject of all his waking meditations, it is likely enough that he might have dreamed of them. At all events, to the old jeweller's diseased mind, the reiterated suggestion of these figures appeared to be proof, "plain as heavenly writ," that these were the fortunate numbers which, duly backed, would lead him on to fortune.

To minds in any degree accustomed to observe or examine the connexion of cause and effect, it seems altogether impossible that any human being, not perfectly insane, should imagine that information of the numbers about to be drawn at hazard out of a wheel should thus be communicated to him. And, in truth, the existence of such a persuasion would be utterly incredible, did we not see it existing, and actively influencing, large numbers of persons, in other respects as sane as the average of mankind. A moment's consideration of the phenomenon sets one speculating as to the possible theories of these lottery devotees respecting the world they live in, the government, and the eternal and almighty governor of it; thoughts too large and serious, maybe, for this light page! Yet they are such as necessarily and properly rise from the subject of it; and without them we should fail to appreciate duly the thick and heavy darkness of the spiritual night—a darkness surely equal to that of the "untutored mind" of any fetish-worshipping Indian—which envelops the pupils of a "paternal" government and a dominant orthodox church.

It is difficult to imagine the nature of the workings of a mind under the hallucination which possessed poor old Laudadio Vanni. But, assuredly, doubt had no place among them. Success, the long-delayed reward of his studies, patience, and perseverance for long years, was now within his grasp! But how was he to avail himself of the great opportunity? Fortune slighted would assuredly never offer her favours

a second time! Cruel, cruel fate! to place the prize within his reach just when he was unable—all but unable—to profit by the golden chance!

Tormented with these thoughts, the old man turned from the bridge, down the Via degli Archibusieri towards the Uffizi, and began pacing to and fro beneath the colonnade that faces the river. Pulling from his pocket the old leathern bag that served him for a purse, he emptied the contents into his lean and shaking hand, and counted up the amount of the various small coins. There was one paul, one half paul, a piece of two crazie, or quarter of a paul, and several of the small thin copper coins called soldi, the twentieth part of the lira, and containing twelve denari. The lira is worth eightpence; and its two hundred and fortieth part, the denaro, no longer exists in the body, but only as a money of account. These Lire, Soldi, and Denari are the originals of our £ s. d., but while prosperity and progress have with us pushed up the value of the coins to pounds and shillings, they have remained in Italy, during her period of stagnation, more nearly of their original worth. So that, although Laudadio counted up one pound ten shillings and eightpence, his whole available assets amounted only to an unstatable fraction more than a shilling.

Now this sum, invested in a ticket for a terno, would, in case of success, produce a prize of some twelve hundred crowns, or about two hundred and fifty pounds; a very large sum to Laudadio Vanni, but far from sufficient to repay him with interest all the moneys he had, in the course of his long life, sunk in lottery tickets. And he considered that Fortune owed him nothing less than this, and that she was now at last ready and willing to discharge all her debt to him, if he could only comply with the indispensable conditions. To make no more than twelve hundred dollars out of the great and sure opportunity now offered to him, seemed a stroke of misfortune and ill luck more difficult to bear than all the disappointments his worship of the blind goddess had hitherto exposed him to. Visions of riches paraded themselves before his mind, riches which should not only bring with them all the advantages which usually accompany them, but which should triumphantly justify in the face of all Florence, and especially of his own friends and family, his wisdom and prudence, and the accuracy and value of his much-boasted science. The more he thought of all this, and the more he pictured to himself the certainty of success, the more the small sum at his disposition seemed altogether contemptible and insignificant.

"If only they would believe me!" he muttered, as he continued in increasing agitation and excitement to walk up and down beneath the dark colonnade, turning over and over in his hands the poor little coins, for which he felt a growing contempt. "If only they in their ignorance would trust the knowledge gained by half a century of study and calculation! But they are

obstinate as ignorance always is. And for whose sake do I need wealth now? Not for my own, I throw. And I could make their fortune for them! All too late for me! But I could make for them a life and position such as my Laura deserves, and such as Carlo Bardi has never dreamed of! And all that is wanting is a few dollars, which they have, and of which they can have no need, till after they will have been returned to them tenfold—a hundred-fold!—a thousand-fold!"

The old man had quickened his pace as these thoughts were passing through his mind; and he continued his walk, even quicker and quicker for some minutes, gesticulating with his arms, and ever and anon coming to a sudden stop in his walk. At last he turned towards the bridge, and slackening his pace considerably, and bending his face more than usual to the ground, he reached the door of his own shop. He paused before putting his hand to the door; looked with a sharp suspicious glance up and down the bridge; pulled a check blue handkerchief from his pocket, with which he wiped the drops from his brow; tossed with an impatient movement the coins he had been counting into his coat pocket, and then entered the little shop.

It was by that time about half-past nine o'clock, and the cavaliere and Carlo were thinking of saying good night. They all took it quite as a matter of course that the old man had been to the office, and had expended all the money in his pocket in a lottery ticket.

"You'll be watching the drawing to-morrow, my friend," said Sestini. "Shall I come with you? If you will, we can meet at the café in the piazza."

"No! I don't know—perhaps I shall not go to-morrow," returned the old man, hesitatingly; but added, after a pause, "well! yes! we will go together. I will look for you at the café a little before mid-day."

Laura and Carlo had meanwhile said their good nights, and once again he and the cavaliere left the shop together.

"Let us go to bed, Laura," said the old man, as soon as ever they were gone. "You will have a long day's work to-morrow, and I am sleepy."

Laura was rather surprised to hear him say so, for his usual habit was to sit up long after she had gone to her closet over the back shop. But she made no remark, her mind being, as may be supposed, full enough of her own thoughts.

"Good night, father," she said; "sleep well, and dream of the numbers of your terno for to-morrow;" and so saying, she climbed the steep stair to her miniature bedroom, leaving him to follow her up the ladder-like stair.

Laudadio went to the door of the shop, opened it, and looked out anxiously, as it seemed, first in one direction, then in the other, and then closing it, put his hand to the heavy bolts and locks, which he moved, as if securing the shop for the night. Yet he turned no lock, and shot no bolt, but, leaving the door thus simply

closed, proceeded to climb the stairs, and entered his room over the front shop. There, instead of beginning to undress himself, he seated himself on the bedside, and remained perfectly still for ten minutes or a quarter of an hour. Opposite to the bed was a sort of cupboard contrived in the thickness of the wall, by the side of the one small window that lighted the room. To this he then went, and from behind some articles of clothing on the uppermost shelf, drew forth a large key. Having possessed himself of this, he again sat down on the bed for several minutes. He then arose, and creeping noiselessly to the stair-head, again paused there some minutes. It might have been thought impossible for the old man to have descended the steep narrow stair with the perfect noiselessness with which he contrived to do it. Once at the bottom, he rapidly, but with caution to avoid the slightest sound, poured from his lamp a drop or two of oil on the wards of the key in his hand, and then applied it to the door of the safe in which Carlo had locked the cavaliere's hundred dollars. The key was, in fact, a duplicate one, laid aside when the other had years ago been entrusted to Laura for the nightly custody of the more precious articles in the shop, and long since forgotten, till the recollection of it had unfortunately occurred to the old jeweller, during his pacing under the Uffizi colonnade.

In less than a minute the two rolls of dollars were in his hands, and leaving the lamp burning on the work-bench, he stealthily stepped through the doorway on to the bridge, and quietly closed the door behind him.

Laudadio Vanni had been, though a gambler during the latter part of his life, yet an upright, honourable, and strictly honest man throughout all the many years of it, and it was in vain that he strove to conceal from himself the nature of the action he was now committing. The big drops stood on his wrinkled brow, and dropped from the ends of the straggling silver locks that fell on either side of his hollow emaciated cheeks. He trembled visibly; and instead of hastening at once on his errand, he paused at the top of the bridge under the colonnade, which at that part of it leaves the river visible. It was by this time nearly half-past eleven. The lottery offices on the night previous to the drawing remain open till twelve. After the first stroke of the clocks sounding midnight, no stake could be played for the morrow's drawing. Yet still he paused. It seemed as if he were half minded to give his honour and fair name the advantage in their struggle with the demon which possessed him, of the chance that he might be too late to accomplish his purpose.

There is under the arches, in the space void of houses, at the top of the bridge, an ancient and dingy picture of a Madonna, in a wooden tabernacle against the wall, and a little dimly twinkling oil-lamp was burning before it. He examined the two rolls of money in the faint ray of light thrown by this lamp, to ascertain that there was

no writing on the paper in which they were wrapped; and then turned towards the parapet, and leaning on it again paused, while the minutes ran on quickly towards the moment at which the power of the tempter would be at an end. It wanted now but ten minutes of the time. But there is no part of the city in which that is not more than ample time enough for reaching a lottery receiving house. The paternal government takes care that the demon of play shall be ever at every man's elbow.

"What would they think of me," he cried, suddenly—"what would they think of me, if they knew all that I know, and knew, also, that I hesitated to obtain the prize for them? The money won with their money will be all theirs, of course. When I give it them, I shall say, 'Now will you believe that your old father's days and nights of study are worth something?'"

And as he muttered thus to himself, he hurried to the well-known counter, and thrusting himself among the crowd of wretches who were staking the halfpence they had succeeded in procuring just in time, he startled the clerks by putting down his two rouleaux for a terno on the numbers 37, 25, and 23.

The officials in these hells are not unaccustomed to strange sights. Remark on them in no wise enters into their functions. So the money was swept up; and the vile looking little strip of coarse grey-blue paper was duly scrawled over, signed, sanded, and put into his shaking hand.

As he quitted the den, the great bell of the palazzo vecchio began to toll twelve. The yawning clerks shut up their books, and "the game was made" for that week.

After having carefully secured the precious document in an inner pocket, Laudadio's first movement was to return to his home, and he began to walk in that direction. But his steps became slower and slower, and by the time he had reached the foot of the bridge, he felt that he could not endure to pass the remaining hours of the night in the stillness of his little room over the shop. He felt a strange reluctance, too, to enter his house again, and pass by that safe in the wall at the bottom of the stairs. No! he would go home no more, till he should go in with his triumph and his justification in his hand. So he turned back once more towards the Uffizi colonnade, and again paced forwards and backwards under the now silent and deserted porticos.

But strangely enough, the result of the desperate stake he had played for, which had seemed to him so safe and certain an hour ago, while the "to be or not to be" was still in his own hands, began, now the fatal step was taken, and the irrevocable die cast, to appear less inaccessible to doubts as to the issue. It was one of those revulsions of feeling which the most compendious scheme of ethical philosophy loves to ascribe to the immediate action of the traitorous fiend; but which the students of mental phenomena would attribute to the sense

of powerlessness which takes possession of us on the completion of an irrevocable deed, aided, in poor Laudadio's case, by the importunate reproaches of his conscience. It was in vain that he repeated again and again to himself that he was only doing far better for his child with her money than she could do for herself; in vain that he argued that as her father he had some right to act for her, and watch over her interests. The genuine utterances of the still small voice are less easily overborne and put down than the dictates of the intellectual powers. The old man might succeed in persuading himself that the numbers to be drawn from the lottery wheel on the morrow were revealed to him by his waking and sleeping dreams; but he could not for an instant bring his conscience to absolve him for the deed he had done. The great prize for which he had been hoping for so many years, was now, as he told himself again and again, as good as won; a greater prize, indeed, than he had ever hoped for, for he had never before had the power of risking so large a sum at one time. Yet probably never in his life had Laudadio Vanni passed a more miserable hour than that which he spent in his midnight pacing under the colonnade of the Uffizi.

At length, wearied in body as well as in mind, he betook himself to the great "loggia" of the piazza. Every one who remembers Florence, remembers this magnificent structure by Orcagna, its wonderful noble arches, and the assemblage of masterpieces in marble and bronze collected beneath its lofty roof. At the back of the building a broad stone bench runs along the wall, and on that Laudadio stretched the long length of his gaunt and weary limbs to await the coming of the dawn. Many a worse sleeping chamber might be lighted on by a weary man than that masterpiece of architecture, proportion, and beauty, all open as it vast arches are to the mild breeze of the Italian summer night. But no bed of down could have brought sleep that night to the old lottery gambler. The stake to be decided by the events of the morrow was too tremendous a one to him. For it will be readily understood that now—strangely inconsistent creatures as we are—the amount of money to be won was the least important part of the interest that for Laudadio hung on the dirty scrap of paper in his pocket.

At last, towards morning, he fell into an uneasy doze, from which he was awakened soon after dawn by the workmen coming to erect the scaffolding for the ceremony of the drawing. The grand "loggia" of Orcagna, in the principal square of the city, is the spot chosen for this purpose, and the carpenters and upholsterers were come to make their preparations. Many a condemned man has been waked from his last earthly sleep by the noise of the erection of a scaffolding for a more terrible, though scarcely less pernicious purpose, and has met the coming day with more apathy than Laudadio felt at these preparations for his triumph or intolerable overthrow! How to get through the next six or seven hours?

That was now the most immediate question. Remain quiet, he could not. Besides, he was too well known in Florence; and it would have been too strange, perfectly well as his devotion to the lottery was known to all the world, for him to have been found there at that hour of the morning. So he slunk away from the piazza, and passing through the obscure streets which lie at the back of the palazzo pubblico, reached the large square in front of the church of Santa Croce. The vast building was already open, and at a far altar in the transept a few old men and women were hearing, or rather looking at, a morning mass. Here a seat, silence, and solitude, were to be had; and Laudadio entered the church and seated himself in a dark corner of the transept, opposite to that in which mass was being said. Here the deep silence of the place, and the fatigue of his sleepless night, gave him the advantage of a couple of hours of forgetfulness. It was nearly eight when he awoke; and he thought he might then venture to go and look at the preparations in the square. He found all there in readiness. There was the gaily decked raised platform, like a box at a theatre, with its seat for the magistrates, the lofty board prepared for the exhibition of the winning numbers, and the music-desks for the band; and above all, there was the wheel in the front of the box, looking like a large barrel-churn, only made of mahogany, and ornamented with brass mountings. In Naples, there would have been also a place for the priest, who, in that country, always attend on these occasions "to keep the devil from interfering with the numbers." But in less religious Tuscany this precaution is omitted. All was ready; but the hours, as it seemed to Laudadio, *would* not move on. He returned once again to Santa Croce, and finding it impossible to sit still, occupied himself with strolling about the immense church, and endeavouring to meet with the important numbers, that were so deeply engraved on his brain, in the many inscriptions on the walls and pavement of the building.

In the mean time, Laura had risen early to begin the various work of her busy day. The lamp which her father had left burning had burned itself out. But the unlocked and unbolted door, and the absence of the old man's hat from its accustomed peg, showed that he had gone out. There was nothing to surprise her much in this. She knew that he was apt to be restless on the morning when the lottery was about to be drawn in Florence, on which occasions he was always sure to play. She doubted not, that when he had left them on the preceding evening, he had gone to buy a ticket with the few pauls he had in his pocket, and supposed that he had gone for a morning stroll to walk off his restlessness. Carlo was to be most part of the day at the custom-house, receiving and passing the goods from Paris, and she did not expect to see him till the evening. So she quietly set to work to arrange, inventory, and ticket a parcel of jewellery that had come in the day before.

Laudadio had firmly determined that he would not leave Santa Croce till the clock should strike the quarter to twelve. Never did hours appear so interminable to him. Yet as they wore away, and the moment, big with fate, approached, he trembled at the nearness of the minute that was to decide his fate. He had found in the adjoining cloister the gravestone of some one who had died at the age of *thirty-seven*, on the *twenty-fifth* of the month, in the year eighteen *'twenty-eight*. The combination thus met with appeared to him a wonderful confirmation of the justice of his expectations. He was much comforted and strengthened by it; and had several times wandered back into the cloister to gaze on the auspicious numbers. He was standing thus dreamily staring at them, when the long-expected quarter to twelve was tolled from the convent belfry. He started, and all the blood in his body seemed to rush back to his heart. It appeared to him that he would fain have yet had one of those hours which had passed so laggingly interposed between him and the moment which now, at the last, he could not prevent himself from regarding with as much of sickening dread as of hope.

He left the church, however, at once, and walked with a quicker step than usual to the café in the piazza, at which he had agreed to meet his faithful friend and admirer, Sestini. The placid little cavaliere was at his tryst, calmly sipping a glass of water into which he had poured the remaining third of his little cup of black coffee, after regaling himself with the other two-thirds neat and hot; a favourite mode with the Italians of spreading the enjoyment derivable from three-halfpenny-worth of coffee over as large space of time as possible. Sestini, little observant as he was, could not help noticing the excited manner, the haggard look, and the feverishly gleaming eye of his friend. It still wanted a few minutes of the hour, and Sestini tried to persuade the old man to take some refreshment before going out into the crowd with which the great square was by this time full. But he could not induce him even to sit down. So the two strongly contrasted old men went out to make their way through the crowd to the immediate front of the hustings prepared for the drawing. The figure and face of the old gambler, stooping with hoary age, yet expressing in every shaking movement and every restless glance an excess of highly-strung nervous excitement, might well have caused remark at any other time or place. But amid the crowd in front of the lottery wheel every one was too much occupied with self, and strangely-moved faces were too common to attract attention.

The band had already begun to play a noisy lively air; the three magistrates in their gowns and high round flat-topped cloth caps were in their places; and two little boys in gay fancy dresses were standing one on each side of that terrible wheel—the instrument of torment little less in amount and in intensity than that caused by the other instrument of the same name the

express object of which was torture. And now began the tedious process of unfolding the little rolled-up scrolls containing the numbers, holding them up to the public view, calling them aloud, handing them from one to the other of the presiding functionaries, and finally dropping them one by one into the wheel. And once again Laudadio thought that the minutes went slowly, and that the preliminary formalities would never be completed.

But at length the whole tale from One to Ninety had been deposited in the wheel. The music sounds; the little boys churn away at the fateful churn; two or three turns have tumbled the numbers into a confusion sufficient to make—to all human ken—CHANCE the sole blind master of the position of them; and then, amid sudden and profound silence, the first number is drawn. The boy plunges his bared arm into the machine, brings out one rolled-up scroll between his finger and thumb, holds it aloft, and passes it, always keeping his hand at arm's length, to one of the presiding trio. He unrolls it, proclaims aloud "EIGHTY-EIGHT," hands it to his colleague, who holds it up aloft open to the people, and passes it to the third officer, who affixes it to the conspicuous board provided for the purpose. Then out blare the trumpets again, and out bursts a tempest of tongues. Nothing is lost yet. Five numbers are to be drawn; and there is yet room for a terno to come up—and to spare. Those, indeed, who have betted that some other number would come up *first* (which is termed playing an "estratto determinato")—those, indeed, have already lost; but for all others "the game is still alive."

Again the music ceases, and again every voice is suddenly hushed. The same mode of operation is repeated, and this time "TWENTY-FIVE" is called aloud, and takes its place on the board by the side of its predecessor.

Again the music and the roar of voices burst forth.

"It's right!" said Laudadio to his sympathising friend, in a faint and choking voice. "Oh yes! it's all right. I have no doubt; none." And Sestini could feel the old man's arm shaking as if he had been struck by sudden paralysis.

Once again the ceremony is repeated, and "37" is the result.

"I knew it! I knew it!" cried the old man, trembling all over, while the big drops of perspiration started to his brow. "Oh! there could be no doubt. Of course I was certain of it." And drawing from his pocket with difficulty, so violently were his hands shaking, the ticket with his numbers, he showed them to his friend, carefully hiding with his lean old hand the sum for which the ticket was made out.

"Ah, my dear friend," said the little cavaliere, "if you had only played for an ambo, you would have been all right." (The ambo is when *two* numbers are named to come up.) "An ambo makes a nice little bit of money. I wish it were an ambo."

"Why an ambo?" returned Laudadio, fiercely. "I tell you my terno is certain—certain!"

By this time all hope is over for the majority of the crowd, and the silence for the drawing of the fourth number is by no means so general. Now for it. "56."

A long deep breath came from the old gambler's chest with a sound almost of a groan, and he closed his eyes for a minute. "But it will be all right, I tell you," he said, angrily, as if his companion had maintained the reverse. "I tell you it is sure. It can't fail me now. It can't!"

And now for the last number—the cast of fortune that was to make all safe or all lost. It was a tremendous moment for the old man. The music and the voices sounded strangely in his ears, as if they were far off. Now, silence! Now!

"Twenty—NINE!" shouted the officer.

For one short moment, as the syllables "twenty" reached his ears, the unhappy old man had imagined that all was well with him. Then came with a roar, as it seemed to him, of a mighty tempest wind rushing through his ears, and crushing him to the earth, the fatal sound that hurled him from the summit of his hopes into an abyss of misery.

"What a pity it was not an ambo," said Sestini, not dreaming that the disappointment was a greater or more important one than the veteran gambler had a thousand times had to bear. But the revulsion was too terrible for old Laudadio's over-excited nervous system. After gazing for a moment with a fixed glassy stare into his companion's face, his long attenuated body swayed to and fro like a tall tree whose foot the axe has nearly severed, his gripe on the cavaliere's arm relaxed, and he fell in a dead swoon on the flagstones of the piazza.

Poor little Sestini was extremely shocked and frightened. The crowd of course formed a ring round the prostrate figure of the old man, whose hat had fallen off, and whose long white locks were straggling over his livid face. For a moment they thought that he was dead. But the heaving of his chest soon indicated that he had but fainted. Many of those around knew old Laudadio Vanni, the jeweller on the Ponte Vecchio, and understood perfectly well the cause of his present trouble. "Poor fellow! he will have been playing high!" said one. "He's one that the Madonna owes a good terno to before he dies!" remarked another. And Sestini, with the aid of three or four of the nearest bystanders, proceeded to carry him to his house on the neighbouring bridge. He probably had regained his consciousness before he reached his home. But his eyes remained closed, and he suffered himself to be carried by those who had picked him up. The fatal ticket remained clutched in his hand, and having been taken from it by Ses-

tini, after those who carried him had placed him in his chair and departed, sufficed to tell very shortly the whole facts of the case.

And the remainder of our story may be told almost as compendiously.

Carlo took the matter very much more coolly than Laura had dared to hope. He said that such things were necessarily to be expected from lottery playing, and—that a new lock, to which he would see himself, must be put on the strong safe.

Sestini remarked that there were few heads in Italy, save that of his friend, who could have discovered *within one* the very numbers to be drawn for a terno. And Laudadio observed that loss in the lottery was number 90.

The marriage took place duly on the Sunday, despite the loss of Godpapa Sestini's dower. And the business-like Carlo and his artist wife have long since ceased to feel the need of such a sum.

Old Laudadio lived several years after the loss of his last great stake. Did that miscarriage serve to open his eyes or cure him of his malady? Any one who is doubtful on such a point has happily little knowledge of the insanity in question.

The present writer has had an interview with Laudadio Vanni. It took place one bright and frosty moonlight night on the "Ponte Trinita." It was late, and there was no other person on the bridge. The striking but shabby-looking old man, courteously lifting his hat, addressed himself to the deponent, and stating that he had something of importance to communicate, proceeded to propose a partnership enterprise in the lottery; the conditions to be, that the deponent should furnish the funds for the purchase of a ticket, while he, Laudadio, would supply numbers dreamed of by him, and warranted to win.

The deponent, deeming the old man no better than a self-conscious and designing swindler, punished him by saying that he approved perfectly of the scheme, only that he would prefer to reverse the parts. But had he known the history, which he learned on mentioning his rencontre to some Florentine friends, and which has been set forth in the preceding chapters, he might probably have treated the old lottery dreamer more gently.

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